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ABSTRACT

Under the Asbestos Hazard Emergency Response Act (AHERA), the United States Environmental Protection Agency (EPA) requires each elementary and secondary school to perform an inspection for asbestos-containing building material (ACBM) and to prepare an asbestos management plan. The AHERA regulations further require a reinspection of the ACBM at least once every 3 years. This reinspection guide will assist local education agencies and AHERA designated persons, asbestos inspectors, and management planners in meeting the specific requirements for an AHERA reinspection and improving the accuracy and quality of information available about ACBM during the reinspection. Chapter 1 discusses the purpose of the guide, time periods for reinspections, terminology, and a summary of relevant AHERA evaluation study reinspection findings. The following responsibilities are spelled out in chapters 2 to 5: AHERA designated person's reinspection planning responsibilities: inspector's reinspection responsibilities; management planner's reinspection responsibilities; and AHERA designated person's recordkeeping responsibilities. Extensive appendices contain sample reinspection forms and checklists, a glossary, lists of the Regional Asbestos Coordinators and the State AHERA designees, and a letter that summarizes EPA's policies for asbestos control in schools and other buildings. A total of five exhibits in the format of recommended checklists and a reinspection notification letter are dispersed within the chapters. (MLF)

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United States
Environmental Protection
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Office of Pollution
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Washington, D.C. 20460

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A GUIDE TO PERFORMING REINSPECTIONS UNDER THE ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)

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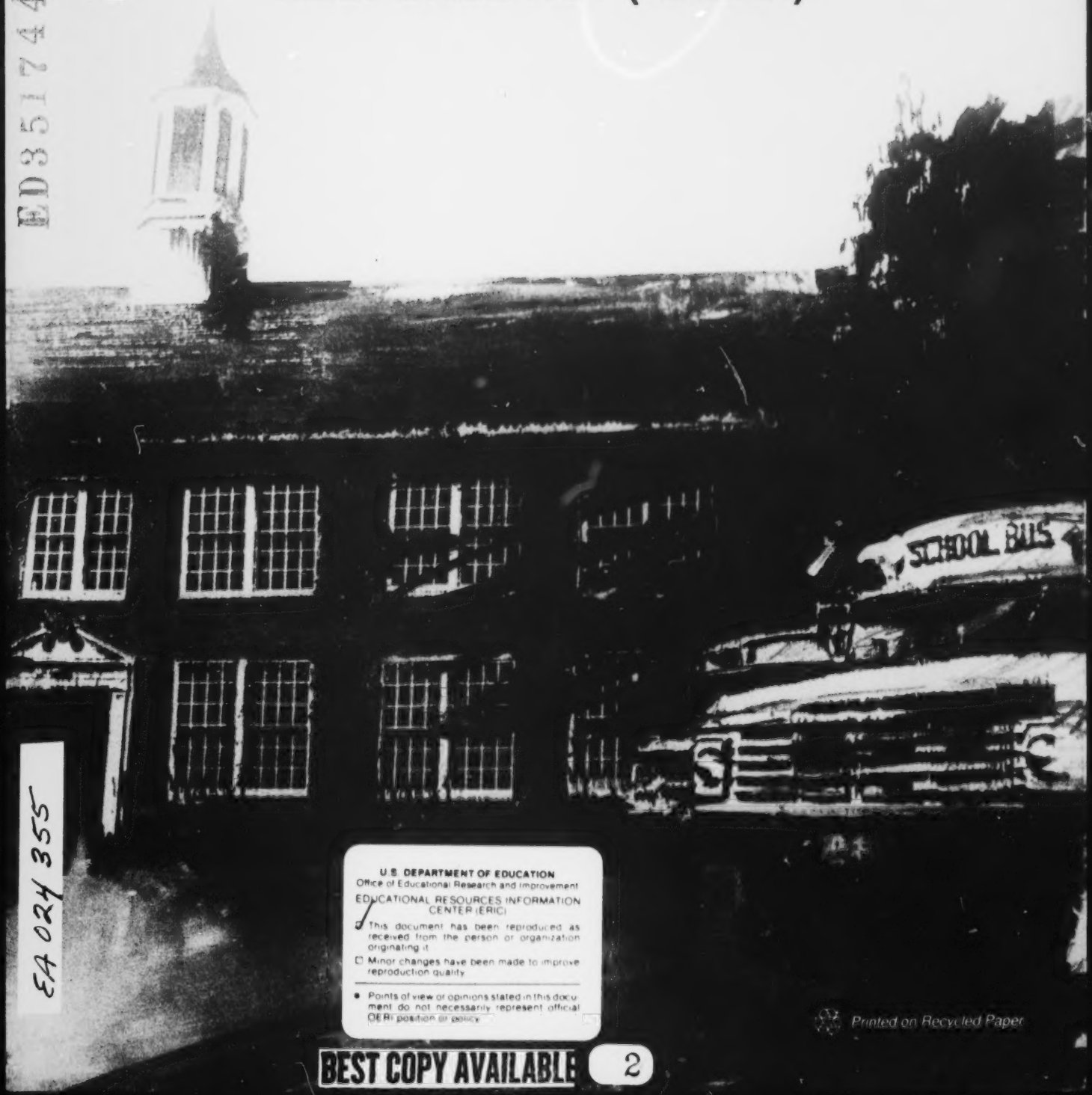

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A GUIDE TO PERFORMING REINSPECTIONS UNDER THE ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Environmental Assistance Division

February 1992

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Susan Marie Viet, CIH
Alexa Fraser, Ph.D.
Dale L. Keyes, Ph.D.

EPA Regional Staff

James Bryson - U.S. EPA Region I
Louis Bevilacqua - U.S. EPA Region II
Al Kramer - U.S. EPA Region II
Carole Dougherty - U.S. EPA Region III
Rhonda Evans - U.S. EPA Region IV
Terrence Stanuch - U.S. EPA Region V
Steve Vargo - U.S. EPA Region VI
Wolfgang Brandner - U.S. EPA Region VII
Greg Crable - U.S. EPA Region VII
David Combs - U.S. EPA Region VIII
Jo Ann Semones - U.S. EPA Region IX
Matt Wilkening - U.S. EPA Region X

EPA Headquarters Staff

Tom Ripp - Stationary Source Compliance Division
Mary Jane Angelo - Office of General Counsel, Pesticides and Toxic Substances Div.
Cindy Fournier - Pesticides and Toxics Enforcement Division
Sally Sasnett - Office of Compliance Monitoring
Sanda Howland - Office of Compliance Monitoring

Environmental Assistance Division

Dave Kling
Bob McNally
Gina Bushong
Joe Schechter
Phil King
Bob Jordan
Diane Sheridan

Other Federal and Outside Organizations

National Association of Independent Schools - James T. Kaull
Council for American Private Education - Greg D. Kubiak
The National Association of Elementary School Principals - Ed Keller
The Council of the Great City Schools - Michael Casserly
American Association of School Administrators - Joyce Hill
U.S. Catholic Conference - Rev. William F. Davis
National Education Association - Joel Packer
National Parent Teacher Association - Carolyn Henrich
Department of Defense Stateside Dependents Schools - Dr. Hector O. Nevarez
Occupational Safety and Health Administration - Dr. Carol J. Jones

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CHAPTER 1. INTRODUCTION

1.1 The Purpose of This Guide

Under the Asbestos Hazard Emergency Response Act (AHERA)[1], the United States Environmental Protection Agency (EPA) requires each elementary and secondary school to perform an inspection for asbestos-containing building material (ACBM) and to prepare an asbestos management plan. The AHERA regulations further require a reinspection of the ACBM at least once every 3 years.

This reinspection guide will assist:

- Local Education Agencies (LEAs),
- AHERA designated persons,
- Asbestos inspectors, and
- Management planners

in meeting the specific requirements for an AHERA reinspection. Further, it provides guidance for improving the accuracy and quality of information available about ACBM during the reinspection.

The reinspection period provides an excellent opportunity for schools to re-evaluate and update their programs for managing asbestos. EPA recently issued general guidelines for asbestos in buildings in an advisory letter from the EPA Administrator which was sent to all LEAs. The letter summarizes EPA's policies for asbestos control in schools and other buildings in the form of "Five Facts." This letter is presented in Appendix H.

This guide addresses only the Federal requirements for reinspections. A school may also be subject to State or local requirements not discussed here. The Regional Asbestos Coordinators and the State AHERA designees are both listed at the end of Appendix I. These individuals can provide more specific information about local regulations, and information on how to obtain further training and assistance.

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[1]40CFR763, *Asbestos-Containing Materials in Schools: Final Rule and Notice*, U.S. Environmental Protection Agency, October 1987.

1.2 Time Periods for Reinspections

The AHERA regulation states that schools must perform reinspections at least once every 3 years after the management plan is implemented. It also required management plans be implemented by July 9, 1989. Therefore, LEAs must complete the first round of reinspections on or before July 9, 1992. If a management plan was implemented before July 9, 1989, the LEA must complete its reinspection within 3 years of the earlier date. Additional questions concerning the AHERA requirements for reinspections are answered in the EPA publication, **Answers to the Most Frequently Asked Questions about Reinspections**. A copy of this publication is in Appendix D.

Example 1. The LEA implements the school's management plan on January 30, 1989.

- The first reinspection must be completed by January 30, 1992,
- The second reinspection must be completed by January 30, 1995, and so forth.

The LEA must submit management plans to the State Governor's office for buildings brought into service after October 12, 1988, prior to their use as a school building. The AHERA regulation also requires reinspection of these buildings at least every 3 years from the date of management plan implementation.

Example 2. The LEA begins to use a building as a school building on September 3, 1991. The LEA performs the original inspection and submits the management plan to the State Governor, as required, on August 30, 1991. Upon expiration of the 90-day period for State review, the plan is implemented on November 30, 1991 (unless the plan has been disapproved by the state).

- The first reinspection for this building must be completed by November 30, 1994.

Example 3. The school implements its management plan on July 9, 1989. The school takes the building out of service as a school building on January 1, 1992.

- If the school returns the building to service on June 1, 1992, the reinspection must be completed by July 9, 1992, within the original 3 year reinspection period.

- If the school returns the building to service on September 1, 1992, the reinspection must be completed by October 1, 1992, within 30 days after commencement of use, for whatever reason.

Note: If the school had not retained the original management plan and inspection reports when the building was taken out of service, a complete original AHERA inspection must be performed (including bulk sample collection), and a new management plan must be developed prior to using the building as a school building again. (See Example 2 above.)

Reinspections are considered complete after four steps occur. These are (1) inspector's completion of the visual examination and assessments of ACBM as detailed in 40CFR763.85(b), (2) inspector's submission of the reinspection findings to the designated person within 30 days following the field work, (3) management planner's review of the results of the reinspection, and (4) management planner's submission of recommendations for response actions to the designated person.

1.3 Terminology Used in this Guide

This section presents important terms or concepts that are used throughout the guide. See Appendix E for a glossary of other key terms.

Functional Space versus Room/Area

AHERA regulations define a functional space as "a room, group of rooms, or homogeneous area designated by a management planner, project designer, or person accredited to conduct response actions." The AHERA Preamble refers to functional space as a "term of art" used by the accredited expert to appropriately characterize an area as containing "significantly damaged friable surfacing ACM" or "significantly damaged friable miscellaneous ACM." In the context of response actions, the affected functional space is that area within the containment area.

This indicates that a functional space can be a grouping of areas with similar response action recommendations. The AHERA definition requires that management planners, not inspectors, define functional spaces.

For the discussion in this guide, the term room/area refers to spaces defined by the inspector during the reinspection. The inspector may interpret this as an individual space surrounded by walls, such as a hallway or classroom; a group of individual spaces; or the entire

homogeneous sampling area. We strongly recommend the first interpretation, i.e., an individual space surrounded by walls. This clearly-defined space will enable the LEA, school staff, and parents to easily review information about ACBM for a specific location.

Original Inspection Versus Reinspection

Original inspection or original AHERA inspection refers to the initial inspection (generally performed before July 9, 1989) to meet AHERA requirements.

Reinspection refers to the required reinspection of all ACBM identified during the original AHERA inspection. LEAs must perform reinspections at least once every 3 years.

When we refer to materials that were not identified during the original AHERA inspection and which are found at a later date (possibly as part of the reinspection activity), we use the term inspection since it refers to the first recording of these materials in the management plan.

LEA Versus AHERA Designated Person

The LEA must designate and train a person to ensure that the AHERA regulations are properly implemented. Since this designated person acts on behalf of the LEA, we use the terms LEA and AHERA designated person or designated person interchangeably in this guide.

1.4 Summary of Relevant AHERA Evaluation Study Reinspection Findings

In June, 1991, the EPA released the report entitled **Evaluation of the Asbestos Hazard Emergency Response Act (AHERA).** This report was prepared as part of a commitment to Congress by EPA to evaluate the effectiveness of the AHERA regulation and to determine which elements might be used in future regulation of public and commercial buildings. A summary document entitled **Asbestos in Schools: Evaluation of the Asbestos Hazard Emergency Response Act (AHERA): A Summary Report** presents the Evaluation Study's major findings. The summary document can be obtained by calling the Toxic Substances Control Act (TSCA) Hotline (see Appendix F). The **Evaluation of AHERA: A Fact Sheet**, which was sent to all schools in the summer of 1991, can also be obtained through the hotline.

The evaluation study was based on a national statistical sample of 198 schools in 30 communities. The study focused only on occupied school buildings in the United States with students in any of grades 1 through 12. There were a few exclusions: buildings constructed after October 1988, buildings where the original AHERA inspection found no asbestos, and buildings where no inspection was conducted in response to AHERA. The report estimates that the schools in the target population, from which the sample for this evaluation was drawn, represent approximately 80 percent of the 106,000 schools in the nation.

The evaluation study covered six major areas of the AHERA regulation:

- identification and assessment of material;
- management plan evaluation;
- response action evaluation;
- original AHERA inspection evaluation;
- process of notification; and
- maintenance and custodial worker training and experience.

The following represent the findings of the AHERA Evaluation that pertain to performing reinspections:

- **unidentified materials**

  Many original AHERA inspections did not identify at least one suspect material present. The most consistently unidentified materials were:

  - fire doors
  - duct insulation
  - resilient sheet flooring/linoleum
  - vibration dampening cloth

  The study did not evaluate smooth wall materials [such as gypsum wallboard (also called sheetrock or drywall), joint compound, and hard plaster]. However, the EPA believes original inspections may have frequently missed these materials.

- **material locations**

  Only 56 percent of the areas where ACBM was identified had the exact location recorded in the management plan.

- **material quantity**

  An estimated 89 percent of the total quantity of suspect ACBM reinspected in the evaluation was reported in the original AHERA inspection.

- **material assessments**

  Ninety-two percent of the ACBM that should have been assessed according to AHERA was actually assessed. Forty-four percent of the ACBM assessed used AHERA categories reporting the amount of damage and potential for damage at the time of inspection.

- **management plans**

  Written management plans generally contain all the required information. This information is often difficult to understand, however, without specialized instruction.

CHAPTER 2. AHERA DESIGNATED PERSON'S REINSPECTION PLANNING RESPONSIBILITIES

Exhibit A presents the first of two checklists for the AHERA designated person. He or she must take a number of steps in planning for the reinspection prior to any field activities. Each of these steps is discussed below.

☐ **A1. Select the inspector(s) and management planner to perform reinspection activities; obtain proof of their current accreditations.**

A person's accreditation is current if he or she has successfully completed an EPA or State approved accreditation or refresher course within 1 year prior to the reinspection activity. Similarly, the management planner reviewing the reinspection results must be accredited under AHERA as a management planner and his or her accreditation must be current. While there is an additional 1-year grace period to take the refresher course without having to take the full course over again (total of 2 years since the last accreditation course), an individual is not considered accredited during the second-year period. There are no other restrictions on the inspector or management planner, with the exception of possible conflict of interest (see page 2-3).

The inspector and management planner may be:

- the person(s) who performed the original inspection and/or prepared the management plan, if accreditation is still current. His or her familiarity with the school could increase efficiency and thus save some time and money. On the other hand, these individuals may repeat errors made during the original inspection;

- the AHERA designated person or other LEA employee, if accredited. However, the LEA must ensure that reinspections are performed conscientiously. Someone who works in a building every day may not be attuned to changes in ACBM condition or may fail to identify suspect materials not reported in the original inspection; or

- a consultant or consulting company employee, if accredited.

Request copies of inspector and management planner certificates to verify that accreditations are current. Include these in the management plan.

Exhibit A. Recommended Reinspection Checklist for the AHERA Designated Person-Planning for the Reinspection

- ☐ 1. Select the inspector(s) and management planner to perform reinspection activities; obtain proof of their current accreditations.

- ☐ 2. Determine the scope of work.
  - ☐ 2a. Clarify which buildings are to be included in the reinspection. Determine whether each building is used as a school building.
  - ☐ 2b. Determine whether previously grouped, similar materials (e.g., all floor tile) should be separated into distinct materials.
  - ☐ 2c. Determine whether previously assumed ACBM should be bulk sampled. Determine whether other bulk samples should be collected.
  - ☐ 2d. Determine whether quantities of ACBM should be re-estimated.
  - ☐ 2e. Determine whether the inspector should look for previously unidentified suspect materials. (Highly recommended by the EPA.)

- ☐ 3. Determine how the reinspection results will be reported.
  - ☐ 3a. Determine whether locations of ACBM should be reported on a room-by-room basis, rather than by a building or homogeneous sampling area basis.
  - ☐ 3b. Determine whether a floorplan or written description, or both, will be used to locate ACBM.
  - ☐ 3c. Determine whether ACBM will be assessed on a room by room, homogeneous sampling area, or some other basis.
  - ☐ 3d. Determine whether photographs or videotape will be used to document material condition.

Conflict of Interest

Although any person whose inspector or management planner accreditation is current may perform their respective roles, the LEA should consider whether a conflict of interest exists. This is particularly important where one person or firm may serve two or more roles at the school. For example, a conflict of interest might exist if the management planner and the asbestos contractor both worked for the same firm. The planner might recommend response actions that are more expensive than necessary to protect human health and the environment. A similar conflict of interest might arise if the same person acts as both inspector and management planner for the school.

Reinspection Assistants

Only an accredited inspector may perform required reinspection activities. An unaccredited assistant cannot locate, touch, or assess ACBM or sign reinspection forms. Such an assistant can, however, record information dictated by the inspector, carry supplies, assist in gaining access to areas, and perform other non-regulated tasks.

☐ **A2. Determine the scope of work.**

You may want to expand upon the minimum requirements for a reinspection, as discussed below. Carefully consider the work required before beginning the field work.

☐ **A2a. Clarify which buildings are to be included in the reinspection. Determine whether each building is used as a school building.**

List the buildings to be reinspected. Include any temporary buildings. LEAs must reinspect all buildings or portions of buildings which were originally inspected and which they "lease, own or otherwise use as a school building" [see 40CFR763.85(b)(1)]. Administrative and maintenance buildings, storage areas, garages, utility facilities, and student housing essential to operating the school and under the authority of the LEA must all be reinspected, if they contain friable or nonfriable known or assumed ACBM.

Management plans are to be developed on a "per school" basis. Homogeneous sampling areas are to be identified for each "school building." A "school" may be comprised of numerous "school buildings." Management plans, however, often do not distinguish between buildings on the same campus. In addition, homogeneous sampling areas are sometimes incorrectly defined across several buildings. For example, one homogeneous sampling area may be "2x4 ceiling tile in Buildings 1, 2, and 3." Treat each building individually for reporting and bulk sampling purposes. Review whether these types of errors occur in the reports for buildings scheduled for reinspection, and instruct the inspector to correct any possible deficiencies.

Buildings which may not need reinspection include:

- **Buildings no longer used as school buildings.**

  Buildings do not require a reinspection if they are no longer used as school buildings when a reinspection is scheduled. This is true even if the LEA still owns or leases them. An example is a temporary trailer which is unused due to decreased enrollment.

  It is recommended that the LEA provide a statement in the management plan that the building is not currently used as a school building. If the LEA decides to use the building at a later date, the building must be reinspected (see Section 1.2). Remember, however, that LEA buildings not currently or ever used as classrooms (e.g., storage or administrative buildings) are subject to AHERA.

- **Buildings in which no known or assumed ACBM was reported in the original AHERA inspection.**

  If no known or assumed ACBM was reported during the original inspection, the building does not have to be reinspected. There should be a statement in the management plan that no ACBM was present. Further, no reinspection is required if the management plan contains a signed statement that the building is asbestos-free in accordance with 40CFR763.99(a).

  We recommend, however, that the LEA reinspect each building for materials often not identified in the original inspection. Such materials include fire doors, resilient sheet flooring/linoleum, interior and exterior duct insulation, vibration dampening cloth, and suspect wall materials. It would also be prudent to look for other suspect materials not identified during the original inspection. (See page 2-7, A2e.)

- **Buildings in which all known or assumed ACBM has been removed.**

  In strict accordance with the AHERA regulation, a building does not have to be reinspected if all ACBM has been removed. Include documentation of the removal in the management plan.

  We recommend that the LEA verify that the removal of ACBM has been complete with no debris left behind, and that there are not still suspect materials in the building which were unidentified during the original AHERA inspection.

- **Buildings constructed after October 12, 1988.**

  School buildings built after October 12, 1988 do not require reinspection if an architect or project engineer responsible for the construction of the building, or an accredited inspector, signs a statement that no ACBM was specified in the construction documents or, to the best of the person's knowledge, that ACBM was not used as a building material.

☐ **A2b. Determine whether previously grouped, similar materials (e.g., all floor tile) should be separated into distinct materials.**

Grouping different materials into one homogeneous sampling area was common during the original inspections. Grouped materials were generally assumed to be ACBM. For example, a management plan might describe all floor tile in a building as a single homogeneous area of ACBM, even though there were five colors or various sizes of floor tile. If this practice occurred, it was a misinterpretation of the homogeneous area concept and should be corrected.

Determine whether the original inspector grouped any unlike materials in your building. Decide whether to treat these materials as different homogeneous sampling areas based on distinguishing factors, such as texture, color, or location. By breaking these groups into their individual materials, a significant quantity of material might be reclassified as non-ACBM (based on results of laboratory analysis).

☐ **A2c. Determine whether previously assumed ACBM should be bulk sampled. Determine whether other bulk samples should be collected.**

There are two choices in dealing with previously assumed ACBM during a reinspection:

(1) continue to assume the material is ACBM, or

(2) collect bulk samples for laboratory analyses, in which case the material can be reclassified as either known ACBM or non-ACBM.

Factors which might affect the decision to collect bulk samples of previously assumed ACBM include:

- additional resources for laboratory analysis are available, or
- assumed ACBM is the only ACBM remaining in a building. The LEA could eliminate periodic surveillance and other ongoing management activities if laboratory analysis confirmed the material as non-ACBM.

- the LEA is planning removal projects or renovations which might affect the assumed ACBM. It is then required to determine whether the material does, in fact, contain asbestos.

The LEA may want to collect additional bulk samples in the following cases:

- the number of samples of pipe fitting insulation or a miscellaneous material appear insufficient to determine if the material is or is not ACBM. An example is where homogeneous areas are very large. EPA strongly recommends that at least three samples be taken in large homogeneous areas, even when the regulations do not require it.

- previously unidentified suspect materials are found during the reinspection. These may be bulk sampled or assumed to contain asbestos.

- materials grouped together for efficiency during the original inspection are now separated into distinct homogeneous sampling areas. An example would be blue 9x9 floor tile and green 9x9 floor tile previously grouped and designated as "all floor tile throughout the building."

☐ **A2d. Determine whether quantities of ACBM should be re-estimated.**

Consider whether the original ACBM quantities were sufficiently accurate for proper management of the material. If actual quantities are significantly different than reported, adjusted cost estimates may affect plans for response actions. In addition, if the LEA now wants to record ACBM quantities room by room, rather than by building, new measurements must be taken. In either case, inspectors' estimates of ACBM quantity are intended for planning purposes only. We recommend that the LEA have their project designer verify the quantities of ACBM in each abatement project during the design development phase.

Decide how the inspector should report quantities of ACBM, i.e., in square feet or linear feet. The AHERA regulations require inspection measurements reported in linear feet or square feet.

Decide also how unit quantities should be handled (as in the case of insulated pipe joints). For abatement purposes, the project designer and contractor normally base their estimates on the number of joints and the diameter of the pipe. This method of reporting is, in fact, easier to track if the location is specific. It may be used in addition to the linear or square feet calculations.

☐ **A2e. Determine whether the inspector should look for previously unidentified suspect materials. (Highly recommended by the EPA.)**

The LEAs must conduct reinspections of all "friable and nonfriable known or assumed ACBM " [see 40CFR763.85(b)]. Thus, if an inspector overlooked a suspect material during the original AHERA inspection, there is no specific requirement that it be included in the reinspection. However, any missed actual or suspect ACBM present in the school represents a violation of AHERA for which both the LEA and the original inspector could be liable. Moreover, since an LEA cannot properly manage asbestos in a building unless it is all identified, we recommend that the original AHERA inspection information be verified, and corrected if necessary, during the reinspection process. With this goal in mind, consider the following materials for inspection:

- materials that were frequently missed in the original inspection - fire doors, resilient sheet flooring/linoleum, interior and exterior duct insulation, and vibration dampening cloth;
- suspect wall materials such as gypsum wallboard (also called sheetrock or drywall), joint compound and hard plaster which the EPA suspects were frequently overlooked;
- distinct materials which were improperly grouped together as a single homogeneous sampling area. Examples are different types or styles of floor tiles and ceiling tiles, and similar acoustical plaster applied at different dates;
- other materials such as boiler fire brick, gaskets, and caulking which may have been missed;
- specific materials of interest to the LEA, such as exterior roofing materials, auditorium curtains, light socket collars, electrical wire insulation, or stored building materials. The regulation does not, however, require inspection of these materials; and
- materials introduced to the building during renovations which have not been properly documented as ACBM or non-ACBM.

☐ **A3. Determine how the reinspection results will be reported.**

Management plans present original inspection results in a variety of formats, many of which are difficult to follow without specialized instruction. The AHERA regulation does not specify the format for reinspection results.

Determine what format will work best for the school. Issues to consider include: Has the original plan been a useful reference in answering questions about ACBM in the school? Are parents and staff interested in detailed reports? Are there numerous materials or numerous ACBM locations, or both, to manage in the school? Do State or local laws have required formats? Do State or local laws exceed Federal requirements?

☐ **A3a. Determine whether locations of ACBM should be reported on a room-by-room basis, rather than by a building or homogeneous sampling area basis.**

The reinspection is a good time to address how to report locations of ACBM. Some management plans report only general locations, e.g., "ceiling tile throughout building." This reporting may be acceptable where 1) only one kind of ceiling tile is present in the building, 2) the material's location is clearly indicated, and 3) the quantity of material is clearly shown. This type of reporting is unacceptable where two or more tile types are present or where both asbestos-containing tiles and non-asbestos-containing tiles are present in the same building.

Reporting locations of ACBM room by room is clearer. Although it may generate extra paperwork for the inspector, it provides the best information for properly managing the materials. In some cases, it may be useful to further describe the location within the room/area. An example would be stating that "transite paneling is installed on the north wall of Room 127" where the other three walls are visually-identical, concrete block walls.

Another approach is to locate each ACBM by describing its entire homogeneous sampling area. In this case, the inspector must clearly define the homogeneous sampling area by an inclusive and exhaustive listing of rooms. Rooms should be identified by number rather than use (such as music room, etc.) since room functions may change. An alternative is for the inspector to highlight on a floorplan all rooms in which the material is present.

☐ **A3b. Determine whether a floorplan or written description, or both, will be used to locate ACBM.**

Decide whether the inspector will record the locations of ACBM by a written description or by highlighting a floorplan, or by some combination of each. In rare cases, floorplans may not be available or readily generated. A floorplan is decidedly more useful than a written description if rooms are not numbered or where numbers may be changed. Even where rooms are numbered, a highlighted floorplan may be the most efficient means of communication. Remember, however, that highlights do not photocopy well.

☐ **A3c. Determine whether ACBM will be assessed on a room by room, homogeneous sampling area, or some other basis.**

Management plans generally report assessment categories for entire homogeneous sampling areas. Although this meets the requirements of the regulation, it may result in small areas with significant damage being ignored because they are part of a larger category of damaged ACBM.

In addition, some management plans do not specify where the damaged ACBM is, e.g., "pipe insulation damage observed in random locations above suspended ceilings." It is useful to assess ACBM in small and specific areas. In this way, the management plan indicates the exact locations of the damaged ACBM.

☐ **A3d. Determine whether photographs or videotape will be used to document material condition.**

Visual records, either photographs or videotape, of ACBM can be very valuable during reinspections. These will show actual changes in materials over time, thus permitting direct comparison between reinspections. These records add to the cost of reinspection, however, and the AHERA regulation does not require them.

CHAPTER 3. INSPECTOR'S REINSPECTION RESPONSIBILITIES

Exhibit B presents the checklist of reinspection activities performed by the inspector. It includes preparatory activities, fieldwork and recordkeeping.

☐ **B1. Review the items on the Reinspection Checklist for the AHERA Designated Person - Planning for the Reinspection.**

Review and understand the decisions made by the designated person for each item on the designated person's reinspection planning checklist (Exhibit A). It is a good idea to meet with the designated person to discuss the scope of work and any specific requests he or she may have.

☐ **B2. Select the field forms to be used (reinspection, reassessment, inspection, bulk sample logs, photograph logs, chain of custody, floorplans).**

Appropriate field forms include:

- reinspection form (see Sample Reinspection Form 2 in Appendix C);
- assessment form, if a separate form is to be used;
- chain of custody and bulk sample collection forms, if additional sampling is expected;
- inspection forms, if previously unidentified materials are to be inspected;
- copies of floorplans, if available; and
- photograph log forms, if photographs are requested.

Ask the designated person to determine whether the forms meet the LEA's specific requirements for the reinspection. Most inspection firms have standardized forms. However, it is usually not too complicated to adopt new formats prior to going into the field.

Exhibit B. Recommended Reinspection Checklist for the Inspector

Planning for the reinspection field activities

- ☐ 1. Review the items on the Reinspection Checklist for the AHERA Designated Person - Planning for the Reinspection.
- ☐ 2. Select the field forms to be used (reinspection, reassessment, inspection, bulk sample logs, photograph logs, chain of custody, floorplans).
- ☐ 3. Review the management plan for the school (see Sample Reinspection Form 1 in Appendix B).
  - ☐ 3a. Obtain or generate a list of all ACBMs and non-ACBMs (and associated identification numbers, if provided) and material categories reported during the original inspection.
  - ☐ 3b. Record the sample results for each homogeneous sampling area of suspect material.
  - ☐ 3c. Record all reported locations of material (descriptions and/or location diagrams) for each homogeneous sampling area.
  - ☐ 3d. Copy the location diagrams, if possible.
  - ☐ 3e. Record the original inspection assessment category assigned to ACBM in each room/area.
  - ☐ 3f. Record any response actions which have occurred and the location of each.
  - ☐ 3g. Record any renovations which have occurred and the location of each.
  - ☐ 3h. Review records of periodic surveillance.
- ☐ 4. Arrange administrative details - time of inspection, school escort, and keys.
- ☐ 5. Assemble all field materials.
  - ☐ 5a. A supply of all field forms, pens, calculator, tape measure, flashlight, and tools.
  - ☐ 5b. Blank floorplans and inspection location diagrams, if available.
  - ☐ 5c. Bulk sample collection tools and clean-up supplies, if required.
  - ☐ 5d. Personal protective equipment, if needed.
  - ☐ 5e. A ladder, if needed.

Exhibit B. Recommended Reinspection Checklist for the Inspector (Continued)

Performing the field activities

- ☐ 6. Meet the school escort.
- ☐ 7. Select the first room/area to be reinspected.
- ☐ 8. Observe and record each ACBM in the selected room/area, referring to the list of homogeneous areas of ACBM and non-ACBM abstracted from the management plan (see Sample Reinspection Form 2).
- ☐ 9. Mark the rooms/areas where each ACBM was observed on the diagram or floorplan (optional).
- ☐ 10. Re-estimate the quantity of each ACBM in the selected room/area (if requested by the designated person).
- ☐ 11. Touch each ACBM in the room/area to determine whether it is friable.
- ☐ 12. Collect additional bulk samples, as instructed by the designated person.
- ☐ 13. Look at the condition and determine the potential for damage or significant damage to each friable ACBM and asbestos-containing TSI in the room/area.
- ☐ 14. Assign a reassessment category to each friable ACBM and asbestos-containing TSI in the room/area.
- ☐ 15. Record the justification of the assigned reassessment category (can use assessment form or notes).
- ☐ 16. Photograph the material, if requested by the designated person.
- ☐ 17. Assess previously unidentified materials in the room/area, if requested by the designated person.
- ☐ 18. Move to next room/area, and repeat as above.

Recordkeeping

- ☐ 19. Complete all field form data items.
- ☐ 20. Record name, signature, date, and accreditation number and State (if applicable) on the reinspection form.

Exhibit B. Recommended Reinspection Checklist for the Inspector (Continued)

Recordkeeping (continued)

☐ 21. **If additional bulk samples were collected, include the exact locations where they were taken. Also include a description of the process used to select sample locations, and the name, signature, date, and accreditation number and State (if applicable) of the inspector(s) collecting each bulk sample in each copy of the school's management plan.**

☐ 22. **Submit the results of the reinspection to the AHERA designated person within 30 days after the reinspection is completed. Note, at a minimum, any changes in ACBM assessment.**

☐ **B3. Review the management plan for the school (see Sample Reinspection Form 1 in Appendix B).**

It can be difficult to abstract the original inspection data necessary to perform the reinspection properly. This is especially so where a different inspector or company is performing the reinspection.

Management plans present the original AHERA inspection data in a wide variety of formats. The way AHERA regulations list required elements in a management plan commonly led to separation of different types of information into distinct chapters. This forces the reader to flip from chapter to chapter, or table to table, in order to find all the information about a particular material.

In some cases, management plans describe the same material in different ways. Often the plans use material numbers and verbal descriptions interchangeably or inconsistently. In other instances, suspect ACBMs which did not contain asbestos are not clearly indicated as distinct homogeneous sampling areas. Indeed, the only reference to these materials may be in the laboratory report of analyses.

Some states have standardized reporting forms. Where the forms are logically sequenced, cross-referenced, and properly completed, it is generally straightforward to abstract the necessary information. Unfortunately, however, management plans generally do not include instructions for use of these standardized forms.

Sample Reinspection Form 1: Original AHERA Inspection Information Abstracted from the Management Plan (Appendix B) shows one way to record all the information necessary for reinspection concisely. Most buildings have less than 10 suspect ACBMs so, the inspector should need only two or three pages of this form. **This form is not mandatory**. A few pages of the management plan may contain all the necessary information and can be photocopied to take into the field. Most management plans are too bulky to use in the field.

☐ **B3a. Obtain or generate a list of all ACBMs and non-ACBMs (and associated identification numbers, if provided) and material categories reported during the original inspection.**

The AHERA regulation requires a "list of whether homogeneous areas...are surfacing material, thermal system insulation, or miscellaneous material" and "an inventory of the locations of the homogeneous areas..." in the management plan. Based on these requirements, most management plans have some listing of materials from which to begin the complete listing. Do not, however, assume that any single list represents all suspect materials addressed by the inspection. Review the entire management plan to discover whether additional materials are reported elsewhere.

Read the text for any references to miscellaneous materials which were not recorded in the inspection data. For example, firedoors were rarely listed as a suspect material. If addressed at all, they were usually discussed generically as suspect ACBM.

It is just as important to obtain information about non-ACBMs as ACBMs. Later, during the inspection, each material in the building can be clearly identified as ACBM, non-ACBM, or a material which was not previously identified. Often, the only information about non-ACBMs is found in the laboratory results section.

Sometimes management plans discuss fiberglass, foam glass, and rubber materials to explain why certain materials in the building were not sampled. This information could be useful during the reinspection. Record any available information.

☐ **B3b. Record the sample results for each homogeneous sampling area of suspect material.**

After generating the list of ACBMs and non-ACBMs, relate each material to the management plan's findings. These findings are either bulk sample results or the designation "assumed ACBM".

The material description on the bulk sample form or laboratory results and the material descriptions for the homogeneous sampling areas may not be the same. In these cases, it may be possible to match laboratory results to materials by comparing the bulk sample location with the listed locations of the homogeneous sampling areas.

☐ **B3c. Record all reported locations of material (descriptions and/or location diagrams) for each homogeneous sampling area.**

Record the location of each ACBM listed in the management plan. As above, scan the entire management plan for location information. For example, non-ACBMs may be indicated only on the bulk sample collection form. Although this form will probably not list all locations, it is a start and should permit the inspector to identify the material.

Occasionally management plans interchange a room number and a room name. For instance, Room 101 may be called the art room in some sections of the management plan. Discuss these problems with the designated person or building maintenance staff, or refer to the building floorplan.

☐ **B3d. Copy the location diagrams, if possible.**

Some management plans contain marked floorplans to show the locations of each ACBM or homogeneous sampling area. This information is useful and can replace listing of locations if copies can be carried into the field. Note that highlighters don't photocopy well. Make sure you have the original.

☐ **B3e. Record the original inspection assessment category assigned to ACBM in each room/area.**

Record the assessment category assigned to each ACBM during the original inspection. Since the reinspection is a comparison to the original AHERA inspection, be careful not to record assessments from a more recent periodic surveillance report.

The AHERA regulation does not require assessment of undamaged nonfriable ACBM (except asbestos-containing TSI). However, some management planners created a new assessment category 8 for nonfriable ACBM. Others listed them as either category 5 or 6, ACBM with potential for damage or significant damage, respectively. Thus, if a surfacing or miscellaneous ACBM remains nonfriable and undamaged at the time of the reinspection, indicate "no change in assessment." (See page 3-11 for a list of the AHERA assessment categories.)

☐ **B3f. Record any response actions which have occurred and the location of each.**

Record where response actions [including Operations and Maintenance (O&M)] were taken. This information is necessary to perform the reinspection properly. For example, if the LEA removed ACBM from a previously documented location, no material should be found in that location. If the LEA encapsulated ACBM, you must determine the friability and overall condition of the material and encapsulant.

The AHERA regulation requires that management plans contain all documentation about ACBM in a building. Thus, records about any response actions, including initial cleaning, should be available for review. Some records may be bound separately from the original plan. For example, removal project specifications can be very long. Ask the designated person to provide the complete asbestos file for the building.

In some cases, there may be no record of an originally recommended response action being taken. Damaged or significantly damaged ACBM involved in these situations should be carefully checked in the field. If you find that, in fact, the recommended response actions have not been carried out (except for response actions scheduled for some future date), you should bring this information to the designated person's attention.

☐ **B3g. Record any renovations which have occurred and the location of each.**

Although management plans do not have to record general renovations, previously unidentified materials may be exposed by such activities. Review information about renovations so newly revealed suspect materials can be inspected. In order to have accurate information about all ACBM or suspect ACBM, schools should maintain records on the asbestos content of materials installed in their buildings after October 12, 1988.

Under the National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos Standard, a school is considered a "facility" and is subject to the requirements of the standard for demolition and renovation.

☐ **B3h. Review records for results of periodic surveillance.**

Periodic surveillance records may contain useful information about an ACBM not recorded elsewhere. Examples include the recording of a small repair activity performed during the periodic surveillance or comments about the cause of new damage to a material.

Remember that the reinspection results must compare current conditions to the original inspection conditions. Be careful not to confuse the results of periodic surveillances with the original inspection results. Periodic surveillances do not have to be performed by accredited inspectors nor are they as comprehensive as a complete AHERA inspection or reinspection.

☐ **B4. Arrange administrative details - time of inspection, school escort, and keys.**

Arrange all administrative details with the designated person before beginning field activities. Many schools do not allow contractors in buildings during school hours. Some may have to arrange for appropriate school personnel to work overtime in the evenings to escort the inspector. Request the keys for all locked areas.

☐ **B5. Assemble all field materials.**

To conduct an efficient reinspection, bring all necessary field materials with you to the building. We suggest the following items:

☐ **B5a. A supply of all field forms, pens, calculator, tape measure, flashlight, and tools.**

Assemble adequate copies of all field forms (see page 3-1, B2). If ACBM quantities are to be re-estimated, you should have a calculator and tape measure. A flashlight is frequently needed to look in areas such as above suspended ceilings, crawlspaces, and closets. Screwdrivers and pliers may be needed to remove access panels, grilles, vents, and electrical plates.

☐ **B5b. Blank floorplans and inspection location diagrams, if available.**

As discussed above, homogeneous sampling area location diagrams generated during the original AHERA inspection are useful. Blank floorplans are also helpful in assuring you have seen all locations and can be used to generate location diagrams. Fire and emergency escape floorplans, usually available for school buildings, are satisfactory substitutes.

☐ **B5c. Bulk sample collection tools and cleanup supplies, if required.**

If the designated person requests that you collect bulk samples of assumed ACBM or previously unidentified materials or makes some other special bulk sample request, assemble appropriate bulk sampling tools. Include clean up supplies such as a spray bottle of encapsulant, paper towels, labeled disposal bags, and a high efficiency particulate air (HEPA) vacuum.

☐ **B5d. Personal protective equipment, if needed.**

You may encounter areas where personal protective equipment is needed. You might need these in a crawlspace or when bulk samples are collected. Pack an appropriate respirator and protective clothing in accordance with the school's or your employer's policies.

☐ **B5e. A ladder, if needed.**

Determine whether you need a ladder to gain access to any area in the school, e.g., above suspended ceilings. Also, find out whether the school will provide a ladder for this activity. Many schools will not provide ladders.

☐ **B6. Meet the school escort.**

Most schools require that a school representative escort building visitors. Review the purpose of the reinspection with the assigned escort and answer his or her questions before beginning the reinspection.

☐ **B7. Select the first room/area to be reinspected.**

Many original inspections began in the boiler room since most thermal system insulation was found there. The first room/area to be reinspected is not as critical since the ACBM types in the building have been identified. Once the first room has been selected, move in a logical pattern through the building so that all areas are reinspected.

☐ **B8. Observe and record each ACBM in the selected room/area, referring to the list of homogeneous areas of ACBM and non-ACBM abstracted from the management plan (see Sample Reinspection Form 2).**

Each suspect ACBM in the room/area should be on the list of information abstracted from the management plan. Identify each ACBM, assumed ACBM, and non-ACBM material. Note the description of each and use consistently in other rooms/areas.

If debris, residue, or overspray of an ACBM is noted in a room/area where it was reported to have been removed, this should be recorded so that the response action can be completed.

If an observed material is not on the list of abstracted information, determine whether the unlisted material is fiberglass, foam glass, rubber or other material which the AHERA regulation excludes from inspection. If it is not an excluded material, it is a previously unidentified material. Proceed in accordance with instructions from the designated person (see page 2-7, A2e).

☐ **B9. Mark the rooms/areas where each ACBM was observed on the location diagram or floorplan (optional).**

Describe the location of each ACBM on the reinspection form. If the designated person wishes additional location diagrams or floorplans, mark them while in each room/area.

☐ **B10. Re-estimate the quantity of each ACBM in the selected room/area (if requested by the designated person).**

If the designated person has requested re-estimation of ACBM quantities, measure each ACBM. Also, make original estimates of the quantity of newly identified suspect material.

☐ **B11. Touch each ACBM in the room/area to determine whether it is friable.**

Touch each ACBM in at least one location. Determine whether the ACBM is friable or nonfriable. A friable material is one which can, when dry, be crumbled, pulverized, or reduced to powder by hand pressure.

It is not advisable to touch friable materials in every location as this may cause unnecessary fiber release. Once you determine a material is friable, you may discontinue touching it. If, however, the material has been encapsulated in a room/area, you should examine it closely across the entire surface and touch it in various locations to ensure the encapsulation is complete for the entire homogeneous area.

Based on the touch determination, the friability rating of an ACBM may be changed during the reinspection:

- Previously considered nonfriable materials may be reclassified as friable, e.g., where water has deteriorated the bonding matrix; or

- Previously considered friable materials may be reclassified as nonfriable, e.g., if an adequate encapsulation of surfacing material or enclosure of TSI has been performed.

☐ **B12. Collect additional bulk samples, as instructed by the designated person.**

If the designated person wants the inspector to collect bulk samples, it is most efficient to collect them while in the room/area. However, in some cases, reinspection must be

completed before bulk sampling can begin. In these cases, define new homogeneous sampling areas and determine random sampling locations in accordance with 40CFR763.86. Whenever the homogeneous area is large, EPA recommends that at least three samples be taken.

☐ **B13. Look at the condition and determine the potential for damage or significant damage to each friable ACBM and asbestos-containing TSI in the room/area.**

Look at the condition of each friable ACBM and asbestos-containing TSI to determine if the material is not damaged, damaged, or significantly damaged. Familiarize yourself with the definition of damaged and significantly damaged friable ACBM as given in the AHERA regulations and interpretive documents. For information on obtaining these documents see Appendix F.

Determine the reasonable potential for damage or significant damage to undamaged friable ACBM and TSI. The AHERA regulations do not specify the procedure for making this determination. Some suggestions include considering the use of the area or the presence of water, vibration, or air streams. An additional factor is the likelihood of human contact with the material. Most inspection companies have created decision trees for use by their employees. Inspector training curricula also provide decision trees for determining potential for damage.

The spatial unit for determination of damage and potential for damage may vary. The entire homogeneous area, the ACBM in each room, or some grouping of rooms/areas may be used. In any case, it is best to record ACBM condition in each room quantitatively and descriptively. For example, record "Room B3 - 10 square feet of surfacing material severely damaged due to water leak above."

☐ **B14. Assign a reassessment category to each friable ACBM and asbestos-containing TSI in the room/area.**

Assign a category to each friable ACBM and each asbestos containing TSI in the room/area. Assign the appropriate AHERA 1 through 7 category (either numerically or in exact words) based on damage, potential for damage, and material category. **Examine the original assessments carefully as the correct number may not have been used, or numbers may not have been used at all.** Also other assessment rankings have been developed and you may use these in addition to but not instead of, the AHERA categories to add detail to the assessments. The seven AHERA assessment categories are as follows:

1. Damaged or significantly damaged TSI ACBM.
2. Damaged friable surfacing ACBM.
3. Significantly damaged friable surfacing ACBM.
4. Damaged or significantly damaged friable miscellaneous ACBM.
5. ACBM with potential for damage.
6. ACBM with potential for significant damage.
7. Any remaining friable ACBM or friable suspected ACBM.

Even when inspectors use the same assessment scheme, assessment variability may be high. Thus, it is important to review the initial assessment rather than performing "blind" reassessments. If the assessment is different than the original AHERA assessment, but the condition of the material is probably the same, explain this difference. For example, "assessed each room rather than the entire homogeneous sampling area." Use periodic surveillance records as a reference for change.

☐ **B15. Record the justification of the assigned reassessment category (can use assessment form or notes).**

The AHERA regulations require a justification for each reassessment category assigned. This may be done by completing a separate assessment form or simply explaining the assigned category.

Material category, current amount of damage, and potential for damage are the minimum considerations in justifying the assigned assessment category. However, the causes of the damage, the type of damage, the amount and location and accessibility of the material, and types and number of occupants using the area are all important to the management planner in determining appropriate response actions.

☐ **B16. Photograph the material, if requested by the designated person.**

Photograph ACBM in the room/area in accordance with instructions from the designated person.

☐ **B17. Assess previously unidentified materials in the room/area, if requested by the designated person.**

If the designated person wants previously unidentified suspect materials inspected, assess these materials while in the room/area. Classify each material into one of the three material type categories (thermal system insulation, surfacing material, or miscellaneous material), determine friability, and assign an assessment category.

If previously unidentified materials are found, but have not been included as part of the reinspection, we suggest you inform the designated person of the additional material.

☐ **B18. Move to next room/area and repeat as above.**

Start the reinspection in one room/area and proceed in a logical sequence from room to room until all rooms/areas of the building with ACBM have been reinspected.

The AHERA regulation does not require reinspection of rooms/areas in which no ACBM was reported during the original AHERA inspection. Confirm the full scope of the reinspection with the designated person prior to field work. LEAs are being encouraged to reinspect all rooms/areas to correct any deficiencies from the original inspection.

We recommend that rooms/areas in which the presence or absence of ACBM is not well documented be reinspected. Such areas might include:

- areas locked or otherwise inaccessible during the original inspection;
- areas where ACBM might be present but were not clearly indicated in the management plan. Examples include rooms where pipe elbow insulation might be present above the suspended ceiling, or student restrooms which are attached to classrooms but not indicated as containing floor tile;
- areas where renovation may have exposed new material. The EPA did not intend that inspectors undertake destructive steps in locating suspect ACBM and, thus, some materials that were hidden at the time of the original inspection may now be visible because of building renovations; and
- areas where ACBM has been removed (to ensure the completeness of the removal activity).

☐ **B19. Complete all field form data items.**

Review each form to ensure you have completed all data items. Clarify any entries that are incomplete or vague. Make sure your handwriting is legible, and all abbreviations used are clear.

☐ **B20. Record name, signature, date, and accreditation number and State (if applicable) on the reinspection form.**

Sign and date the form and provide current accreditation information.

☐ **B21. If additional bulk samples were collected, include the exact locations where they were taken. Also include a description of the process used to select sample locations, and the name, signature, date, and accreditation number and State (if applicable) of the inspector(s) collecting each bulk sample in <u>each</u> copy of the school's management plan.**

Record all of the information listed above whenever a bulk sample is collected. Many management plans do not describe the procedures used to determine each sampling location. Often, the plan merely quotes the AHERA requirements for the number of random samples based on quantity of surfacing material present. Many do not state how sample locations are determined for each thermal system insulation and miscellaneous material.

☐ **B22. Submit the results of the reinspection to the AHERA designated person within 30 days after the reinspection is completed. Note, at a minimum, any changes in ACBM assessment.**

Deliver the reinspection report to the designated person within 30 days after completing the field activities. This report must indicate any changes in ACBM assessment. Thus, if you found no changes in assessment, the reinspection report can be as simple as a letter stating that fact. The designated person may, however, have requested a more elaborate report documenting the actual locations and the specific ACBMs reinspected.

CHAPTER 4. MANAGEMENT PLANNER'S REINSPECTION RESPONSIBILITIES

Exhibit C presents the management planner's checklist of reinspection activities, including recommendations for response actions and recordkeeping. These activities are described in this chapter.

☐ **C1. Review the results of the original AHERA inspection, periodic surveillance records, and the reinspection.**

Review the original inspection report, periodic surveillance records, and the completed reinspection forms and report in preparation for making response action recommendations.

☐ **C2. Visit the school or take other necessary actions to recommend response actions to the LEA.**

Take any additional steps needed to make response action recommendations. Such steps may include visiting the building to consider the possible alternative response actions, talking with the inspector to clarify the reassessment information, and reviewing the budget constraints and planned response actions at the school with the designated person.

☐ **C3. For each friable surfacing and miscellaneous ACBM and each asbestos-containing TSI reported by the inspector, make written response action recommendations.**

Written recommendations for response actions are particularly important if either the assessment or friability determination has changed since the original inspection, or if the reinspection discovers previously unidentified ACBM.

☐ **C3a. Describe preventive measures and response actions for each assessment location of the ACBM.**

Describe the exact response actions or preventive measure you recommend. For example, preventive measures might include repairing a water leak to prevent further deterioration of pipe joint insulation, installing a doorstop to prevent damage to asbestos wallboard, or instructing teachers not to hang anything from asbestos-containing ceiling tiles.

Describe "how to" perform repairs to ACBM if this response action is recommended. For example, do not say "repair damaged pipe insulation." Rather, say "use wettable lagging and encapsulant to repair damage."

Exhibit C. Recommended Reinspection Checklist for the Management Planner

Recommendations for response actions

- ☐ 1. **Review the results of the original AHERA inspection, periodic surveillance records, and the reinspection.**
- ☐ 2. **Visit the school or take other necessary actions to recommend response actions to the LEA.**
- ☐ 3. **For each friable surfacing and miscellaneous ACBM and each asbestos-containing TSI reported by the inspector, make written response action recommendations.**
  - ☐ 3a. **Describe preventive measures and response actions for each assessment location of the ACBM.**
  - ☐ 3b. **Consider whether cleaning in accordance with procedures in 40CFR763.91(c) should be performed in each area and make appropriate recommendations in writing.**
- ☐ 4. **Include a schedule for beginning and completing the recommended cleaning and response actions.**
- ☐ 5. **Estimate the resource requirements for the recommended response actions.**
- ☐ 6. **Review the adequacy of the O&M Plan.**

Recordkeeping

- ☐ 7. **Record name, signature, date, and accreditation number and State (if applicable) on the reinspection form.**
- ☐ 8. **Submit written recommendations for the response actions to the designated person.**

☐ **C3b. Consider whether cleaning in accordance with procedures in 40CFR763.91(c) should be performed in each area and make appropriate recommendations in writing.**

Recommend additional cleaning where friable ACBM, assumed friable ACBM, or damaged or significantly damaged TSI is present. Specify cleaning methods and frequency. Indicate each specific room/area requiring cleaning. Rather than parrot the regulation's statement that cleaning must be performed in certain instances, specify how, when, and where to perform cleaning.

☐ **C4. Include a schedule for beginning and completing the recommended cleaning and response actions.**

Specify a schedule that designates actual dates for beginning and completing each response action recommended so that human health and the environment are protected.

☐ **C5. Estimate the resource requirements for the recommended response actions.**

Estimate the resource requirements for all response actions you recommend. This should be a comprehensive presentation of all estimated costs. Include purchase of required ACBM maintenance equipment and supplies, training of personnel, removal costs (including design fees), and air sampling and laboratory costs.

☐ **C6. Review the adequacy of the O&M Plan.**

Although not specifically required by the AHERA regulation, you should review the adequacy of the written O&M Plan to maintain all ACBM in good condition. If deficiencies are found, make recommendations for changes to the designated person. An example might be to recommend additional training for maintenance personnel in a school where repairs to ACBM have not been sufficient to prevent the release of fibers into the air.

☐ **C7. Record name, signature, date, and accreditation number and State (if applicable) on the recommendation form.**

Sign the written recommendations for response actions and provide current accreditation information.

☐ **C8. Submit written recommendations for response actions to the designated person.**

Forward the written recommendations to the designated person. The AHERA regulations do not specify a time frame for this submittal, but it is important to be as prompt as possible and probably should not exceed 30 days. The reinspection is not complete until the management planner has submitted written recommendations.

CHAPTER 5. AHERA DESIGNATED PERSON'S RECORDKEEPING RESPONSIBILITIES

The designated person has the final responsibility for recordkeeping. This recordkeeping is detailed in Exhibit D.

☐ **D1. Include the reinspection report and recommended response actions in each copy of the school's management plan.**

Include a reinspection report in every copy of the management plan. In addition to maintaining the report at the district administrative offices and the school's administrative office, as required, the LEA may have copies maintained at maintenance or custodial offices and the designated person's office.

☐ **D2. Include a written statement indicating agreement or disagreement with the management planner's recommendations for response actions, justification for any disagreement, and an implementation schedule for the response actions in the management plan. (Recommended by the EPA.)**

Write a statement showing agreement or disagreement with the recommended response actions. Assist in the preparation of a schedule for implementation of the response actions. This schedule must be within the time frame specified by the management planner. If this is not possible, present justification for why the time frame will not be met, and a plan for how the affected materials will be managed in the interim under the O&M Plan.

☐ **D3. Include inspection report findings for any previously unidentified materials (and, if ACBM is found, include management planner recommendations) in the management plan.**

If previously unidentified materials were inspected, include the inspection report in the management plan. An inspection report is similar to the reinspection report with additional information. Refer to the AHERA regulation or contact a State or EPA Regional Asbestos Coordinator (Appendix I) for details on inspection reports.

☐ **D4. Include a copy of a document describing steps taken to inform workers and building occupants, or their legal guardians, about the reinspection in each copy of the school's management plan.**

The AHERA regulation allows a great deal of flexibility in the methods used to notify parents and staff of the reinspection. Letters to PTA and the employee's union, an article in an LEA newsletter, or letters to each parent about the reinspection are all appropriate methods of notification. At a minimum, inform parents and staff that a reinspection has occurred. It may also be useful to tell them of any new materials

Exhibit D. Recommended Reinspection Checklist for the AHERA Designated Person - Recordkeeping

- ☐ 1. Include the reinspection report and recommended response actions in each copy of the school's management plan.
- ☐ 2. Include a written statement indicating agreement or disagreement with the management planner's recommendations for response actions, justification for any disagreement, and an implementation schedule for the response actions in the management plan. (Recommended by the EPA.)
- ☐ 3. Include inspection report findings for any previously unidentified materials (and, if ACBM found, include management planner recommendations) in the management plan.
- ☐ 4. Include a copy of a document describing steps taken to inform workers and building occupants, or their legal guardians, about the reinspection in each copy of the school's management plan.
- ☐ 5. Evaluate the effectiveness of the asbestos operations and maintenance (O&M) program and periodic surveillance. Revise, as appropriate.

found. Parents and staff generally prefer a letter for each school with comments about specific materials. Exhibit E presents a sample letter for notification of reinspection. Information about reinspections must also be included in the required annual notification to parents and workers.

The AHERA regulations do not clearly specify the time frame for providing notification of reinspections. It is best however, that the LEA or school provide notification as soon as possible after receiving the reinspection report and recommendations. At a minimum, include information about the reinspection in the annual notification about management plan availability.

Once parents and staff are notified, include a dated notification in the management plan as documentation. Notify the State, if required.

☐ **D5. Evaluate the effectiveness of the asbestos Operations and Maintenance (O&M) Program and periodic surveillance. Revise, as appropriate.**

When the reinspection is complete, take time to evaluate whether the asbestos O&M Program has been effective in maintaining all ACBM. Think about problems the staff has experienced in implementing O&M procedures. Consider alternative procedures and revise the written O&M Program to reflect these changes. An example is adding a written work permit system to prevent maintenance staff from drilling into asbestos-containing ceiling material. Also, consider whether the periodic surveillance was effective in identifying areas of increased deterioration and damage, and alter the schedule for areas needing closer scrutiny.

Delete any O&M procedure which is no longer applicable. An example is deleting the written procedure for repairing pipe elbow insulation after all TSI is removed from the school.

Exhibit E. Recommended Sample Reinspection Notification Letter

EASTSIDE COMMUNITY PUBLIC SCHOOLS

East Park Avenue
Eastside, CA 91005
(999) 922-3333

Bob Smith, Superintendent

Notification of Asbestos Reinspections

TO: Parents and Staff of Eastside Middle School

FROM: Bob Smith, Superintendent of Schools

DATE: December 15, 1991

In compliance with the U.S. Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), in the fall of 1988 we performed inspections of each of our school buildings for asbestos-containing building materials. The inspection findings and asbestos management plans have been on file in each school administrative office since that time.

The EPA requires us to perform reinspections of the asbestos materials every three years. During the months of September through November 1991, accredited asbestos inspectors performed these reinspections. An accredited management planner reviewed the results of the reinspections and recommended actions we should take to safely manage each asbestos material in our buildings.

Two significant findings were noted during the reinspection of Eastside Middle School:

- Asbestos-containing water pipe insulation in the kitchen over the dishwasher is slowly deteriorating due to high humidity. The material is scheduled for removal over the Christmas break.

- Linoleum in all bathrooms was not included in the original AHERA inspection. The backing (between the vinyl layer and the floor) is assumed to contain asbestos. The vinyl layer is in good condition and provides an effective barrier, preventing asbestos fiber release. This material has been added to our asbestos maintenance program and we will monitor it for any changes in condition.

All other asbestos materials in this school are in good condition and we will continue to manage them in place, as recommended by the accredited management planner.

The results of the reinspection are on file in the management plan in the school's administrative office. Everyone is welcome to view these anytime during normal school hours (M-F, 8:00 a.m. - 4:30 p.m.). The Asbestos Program Manager, Jill Williams, is available to answer any questions you may have about asbestos in our buildings at (999) 922-3334.

APPENDIX A

AHERA REGULATORY
CITATIONS FOR REINSPECTIONS

AHERA REGULATORY CITATIONS FOR REINSPECTIONS

The following are quotations cited in this document from the AHERA regulations published October 30, 1987. They are presented to assist LEAs, AHERA designated persons, inspectors, and management planners in performing their responsibilities.

40 CFR 763.84 General Local Education Agency Responsibilities

(c) Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

40 CFR 763.85 Inspections and Reinspections

(b) Reinspections

(1) At least once every 3 years after a management plan is in effect, each local education agency shall conduct a reinspection of all friable and nonfriable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building.

(2) Each inspection shall be made by an accredited inspector.

(3) For each area of a school building, each person performing a reinspection shall:

(i) Visually reinspect, and reassess, under § 763.88, the condition of all friable known or assumed ACBM.

(ii) Visually inspect material that was previously considered nonfriable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection.

(iii) Identify any homogeneous areas with material that has become friable since the last inspection or reinspection.

(iv) For each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with § 763.86 and § 763.87.

(v) Assess, under § 763.88, the condition of the newly friable material in areas where samples are collected, and newly friable materials in areas that are assumed to be ACBM.

(vi) Reassess, under § 763.88, the condition of friable known or assumed ACBM previously identified.

(vii) Record the following and submit to the person designated under § 763.84 a copy of such record for inclusion in the management plan within 30 days of the reinspection:

(A) The date of the reinspection, the name and signature of the person making the reinspection, State of accreditation, and if applicable, his or her accreditation number, and any changes in the condition of known or assumed ACBM.

(B) The exact locations where samples are collected during the reinspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(C) Any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, State of accreditation, and if applicable, his or her accreditation number.

40 CFR 763.93 Management Plans

(d) Each local educational agency shall maintain and update its management plan to keep it current with ongoing operations and maintenance, periodic surveillance, inspection, reinspection, and response action activities. All provisions required to be included in the management plan under this section shall be retained as part of the management plan, as well as any information that has been revised to bring the plan up-to-date.

(e) The management plan shall be developed by an accredited management planner and shall include:

(1) A list of the name and address of each school building and whether the school building contains friable ACBM, nonfriable ACBM, and friable and nonfriable suspected ACBM assumed to be ACM.

(2) For each inspection conducted before December 14, 1987:

(i) The date of the inspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM, and, if possible, the exact locations where bulk samples were collected, and the dates of collection.

(iii) A copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses.

(iv) A description of any response actions or preventive measures taken to reduce asbestos exposure, including if possible, the names and addresses of all contractors involved, start and completion dates of the work, and results of any air samples analyzed during and upon completion of the work.

(v) A description of assessments, required to be made under § 763.88, of material that was identified before December 14, 1987, as friable ACBM or friable suspected ACBM assumed to be ACM, and the name and signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(3) For each inspection and reinspection conducted under § 763.85:

(i) The date of the inspection or reinspection and the name and signature, State of accreditation and, if applicable, the accreditation number of each accredited inspector performing the inspection or reinspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, homogeneous areas where friable suspected ACBM is assumed to be ACM, and where nonfriable suspected ACBM is assumed to be ACM.

(iii) A description of the manner used to determine sampling locations, and the name and signature of each accredited inspector collecting samples, the State of accreditation, and if applicable, his or her accreditation number.

(iv) A copy of the analyses of any bulk samples collected and analyzed, the name and address of any laboratory that analyzed bulk samples, a statement that the laboratory meets the applicable requirements of § 763.87(a) the date of analysis, and the name and signature of the person performing the analysis.

(v) A description of assessments, required to be made under § 763.88, of all ACBM and suspected ACBM assumed to be ACM, and the name, signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(4) The name, address, and telephone number of the person designated under § 763.84 to ensure that the duties of the local education agency are carried out, and the course name, and dates and hours of training taken by that person to carry out the duties.

(5) The recommendations made to the local education agency regarding response actions, under § 763.88(d), the name, signature, State of accreditation of each person making the recommendations, and if applicable, his or her accreditation number.

(6) A detailed description of preventive measures and response actions to be taken, including methods to be used, for any friable ACBM, the locations where such measures and action will be taken, reasons for selecting the response action or preventive measure, and a schedule for beginning and completing each preventive measure and response action.

(7) With respect to the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM, one of the following statements:

(i) If the State has adopted a contractor accreditation program under section 206(b) of Title II of the Act, a statement that the person(s) is accredited under such plan.

(ii) A statement that the local education agency used (or will use) persons who have been accredited by another State which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206(c) of Title II of the Act.

(8) A detailed description in the form of a blueprint, diagram, or in writing of any ACBM or suspected ACBM assumed to be ACM which remains in the school once response actions are undertaken pursuant to § 763.90. This description shall be updated as response actions are completed.

(9) A plan for reinspection under § 763.85, a plan for operations and maintenance activities under § 763.91, and a plan for periodic surveillance under § 763.92, a description of the recommendation made by the management planner regarding additional cleaning under § 763.91(c)(2) as part of an operations and maintenance program, and the response of the local education agency to that recommendation.

(10) A description of steps taken to inform workers and building occupants, or their legal guardians, about inspections, reinspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

(11) An evaluation of the resources needed to complete response actions successfully and carry out reinspection, operations and maintenance activities, periodic surveillance and training.

(12) With respect to each consultant who contributed to the management plan, the name of the consultant and one of the following statements:

(i) If the State has adopted a contractor accreditation plan under section 206(b) of Title II of the Act, a statement that the consultant is accredited under such plan.

(ii) A statement that the contractor is accredited by another State which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act, or is accredited by an EPA-approved course developed under section 206(c) of Title II of the Act.

40 CFR 763.99 Exclusions

(a) A local education agency shall not be required to perform an inspection under § 763.85(a) in any sampling area as defined in 40 CFR 763.103 or homogeneous area of a school building where:

(1) An accredited inspector has determined that, based on sampling records, friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under § 763.84 for inclusion in the management plan. However, an accredited inspector shall assess the friable ACBM under § 763.88.

(2) An accredited inspector has determined that, based on sampling records, nonfriable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under § 763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable has become friable since that previous inspection and shall assess the newly-friable ACBM under § 763.88.

(3) Based on sampling records and inspection records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled, before December 14, 1987 in substantial compliance with § 763.85(a), which for purposes of this section means in a random manner and with a sufficient number of samples to reasonably ensure that the area is not ACBM.

(i) The accredited inspector shall sign and date a statement, with his or her State of accreditation and if applicable, accreditation number that the homogeneous or sampling area determined not to be ACBM was sampled in substantial compliance with § 763.85(a).

(ii) Within 30 days after the inspector's determination, the local education agency shall submit a copy of the inspector's statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(4) The lead agency responsible for asbestos inspection in a State that has been granted a waiver from § 763.85(a) has determined that, based on sampling records and inspection records, no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled before December 14, 1987, in substantial compliance with § 763.85(a). Such determination shall be included in the management plan for that school.

(5) An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in that homogeneous or sampling area is assumed to be ACM. The inspector shall sign and date a statement to that effect, with his or her State of accreditation and if applicable, accreditation number and, within 30 days of such determination, submit a copy of the statement to the person designated under § 763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was nonfriable suspected ACBM assumed to be ACM has become friable since the previous inspection and shall assess the newly friable material and previously identified friable suspected ACBM assumed to be ACM under § 763.88.

(6) Based on inspection records and contractor and clearance records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area where asbestos removal operations have been conducted before December 14, 1987, and shall sign and date a statement to that effect and include his or her State of accreditation and, if applicable, accreditation number. The local education agency shall submit a copy of the statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(7) An architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector signs a statement that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building. The local education agency shall submit a copy of the signed statement of the architect, project engineer, or accredited inspector to the EPA Regional Office and shall include the statement in the management plan for that school.

APPENDIX B

SAMPLE REINSPECTION FORM 1:
ORIGINAL AHERA INSPECTION INFORMATION
ABSTRACTED FROM THE MANAGEMENT PLAN
AND INSTRUCTIONS FOR USING REINSPECTION FORM 1

Sample Reinspection Form 1. Original AHERA Inspection Information Abstracted from the Management Plan

Page _____ of _____

School _____ Building _____ Date(s) of Original AHERA Inspection _____

Homogeneous sampling areas		Material category	Asbestos content	Friability	AHERA assessment category (1-7, X, None)	Recorded locations of material for each assessment category	Response actions taken/ renovations/other comments
ID number	Material description						
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			

Information abstracted by _____ Date _____

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA assessment category: 1 = Damaged or significantly damaged TSI ACBM, 2 = Damaged friable surfacing ACBM, 3 = Significantly damaged friable surfacing ACBM, 4 = Damaged or significantly damaged friable miscellaneous ACBM, 5 = ACBM with potential for damage, 6 = ACBM with potential for significant damage, 7 = Any remaining friable ACBM or friable suspected ACBM, X = not applicable (material is non-ACBM or nonfriable surfacing or miscellaneous material), None = No assessment category provided in original inspection.

SAMPLE REINSPECTION FORM 1: ORIGINAL AHERA INSPECTION INFORMATION ABSTRACTED FROM THE MANAGEMENT PLAN

Instructions for Use

Assemble the management plan and all related documentation, e.g., removal records and periodic surveillance reports, for the school. It is best if the inspector who will perform the reinspection completes this form, but anyone familiar with inspection and reinspection protocols may do so. A completed example of Form 1 is presented on page B-6 to illustrate the process.

School

Enter the name of the school whose AHERA management plan you are reviewing.

Building

Enter the name of the first building whose inspection information you are reviewing. If there is more than one building at the school, complete a separate Form 1 for each building.

Date(s) of Original AHERA Inspection

Locate the date(s) on which the original AHERA inspection occurred in the building and record.

Homogeneous sampling areas - ID number

Scan the management plan for a list or other description of homogeneous sampling areas, including all non-ACBM homogeneous sampling areas. As you find each one, record the identification number assigned to the material. If an identification number was not assigned, enter "X" in this block.

Homogeneous sampling areas - Material description

Record the complete, word-for-word description of each ACBM and non-ACBM homogeneous sampling area next to the appropriate ID number. An example is "2x4 white lay-in ceiling tile" or "2x4 off-white ceiling tile." Small variations in descriptions can be important in differentiating homogeneous sampling areas during subsequent fieldwork. Fill in the quantity of the material where that could help in differentiating between similar materials. Check the list of bulk samples collected and the laboratory report for possible non-ACBMs.

Material category

Find the assigned material category for each material identified (TSI, surfacing material or miscellaneous material) and circle the corresponding category in this column.

Asbestos content

Find the asbestos content of each homogeneous sampling area. Circle "Assumed" if the material was assumed to contain asbestos, "Yes" if the material is known to contain asbestos based on laboratory analysis of bulk samples, or "No" if the material is known to be non-asbestos-containing based on laboratory analysis of bulk samples, or non-ACBM by definition (e.g., metal, wood, fiberglass, or rubber).

Friability

Find the AHERA inspection's friability determination for the known and assumed ACBM. Circle "F" if the material was rated as friable, "NF" if the material was rated as nonfriable, or "X" if the material was determined to be non-ACBM.

AHERA assessment category (1-7, X, None)

Find the assessment category(ies) assigned to the friable homogeneous sampling areas of ACBM and the asbestos-containing TSI. If they were assigned as AHERA category 1-7, record in this column. Examine the original assessments carefully as the correct number may not have been used, or numbers may have not been used at all. Refer to the definitions on the bottom of Sample Form 1 if words are used in the original management plan. If more than one category was assigned, write each of these in a separate row next to the appropriate locations (see the two pipe elbow insulation entries on the completed example of Sample Form 1). If the original AHERA inspection did not use the AHERA 1-7 categories, record the original insepction's actual words in this column.

If the material is non-ACBM or was rated nonfriable surfacing or miscellaneous material, no assessment was required. Enter "X" in this column. If no assessment category is provided for friable ACBM as required, record "none" in this column.

Recorded locations of material for each assessment category

Scan the management plan for all listed or otherwise described locations of the material. Be sure to check bulk sample collection locations, especially for non-ACBMs. Record each room/area in which the material is present.

If a floorplan shows the locations of the material in the management plan, a copy of the floorplan can replace the listing of all rooms/areas in this column. In this case, simply write "see attached floorplan" in the space provided.

You should list the rooms/areas by assessment category and general location in the school on this form. For example, if pipe elbow insulation in the boiler room was reported as assessment category 1, list the boiler room in a separate row next to assessment category 1. If the pipe elbow insulation above ceiling tiles was reported as assessment category 5, list these areas in a separate row next to assessment category 5 (see the completed example of Sample Form 1).

Response Actions Taken/Renovations/Other Comments

Review the management plan for all completed response actions. In addition, consult the designated person about response actions taken and renovations which have occurred in the building. Renovations, in particular, may not be indicated in the management plan. Summarize response actions and renovations in the space provided.

If a material is non-ACBM, AHERA regulations do not require response actions. Enter "X" in this column (see row 3 of completed example of Sample Form 1). If an ACBM is nonfriable, response action recommendations are not required but were often recommended or performed. Enter "X" or a brief summary, as appropriate. Row 1 of Sample Form 1 shows an example of this latter situation where floor tile rated as nonfriable was included in the O&M program.

Information Abstracted By Date

Sign the form and record the date on the lines provided.

Continue to the next blank row for each homogeneous sampling area reported in the management plan until you have described all materials in the building. Use more than one Form 1 when there are more than six materials with different assessment categories in a building. Number all pages when inspection information has been abstracted for all materials in the building. For example, number two pages, page 1 of 2 and page 2 of 2.

If there is more than one building to be reinspected at the school, complete one or more Form 1s for each building.

COMPLETED EXAMPLE

Sample Reinspection Form 1. Original AHERA Inspection Information Abstracted from the Management Plan

School Lafayette Elementary Building Classroom Building 2 Date(s) of Original AHERA Inspection 11/4/88

Homogeneous sampling areas		Material category	Asbestos content	Friability	AHERA assessment category (1-7, X, None)	Recorded locations of material for each assessment category	Response actions taken/ renovations/other comments
ID number	Material description						
HA-01	Floor Tile	TSI Surf. (Misc.)	(Assumed) Yes No	F (NF) X	X	Throughout School	Included in O+M Program
HA-02	1x1 Ceiling Tile	TSI Surf. (Misc.)	Assumed (Yes) No	(F) NF X	5	Rooms 101-110, Hallway A+B, Main Office, Teacher's Lounge	All Ceiling Tile (1x1) Encapsulated 12/88
HA-03	2x4 Ceiling Tile	TSI Surf. (Misc.)	Assumed Yes (No)	F NF (X)	X	Lunchroom	X
HA-04	Fire Doors	TSI Surf. (Misc.)	(Assumed) Yes No	F (NF) X	X	All Exterior Entrances, Boiler Room	NONE
HA-05	Pipe Elbow Ins	(TSI) Surf. Misc.	Assumed (Yes) No	(F) NF X	1	Boiler Room	Removed 12/88
	" " "	(TSI) Surf. Misc.	Assumed (Yes) No	F (NF) X	5	Above Ceiling Tile Throughout Building	O+M

Information abstracted by Jane Smith Date 10/7/91

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA assessment category: 1 = Damaged or significantly damaged TSI ACBM, 2 = Damaged friable surfacing ACBM, 3 = Significantly damaged friable surfacing ACBM, 4 = Damaged or significantly damaged friable miscellaneous ACBM, 5 = ACBM with potential for damage, 6 = ACBM with potential for significant damage, 7 = Any remaining friable ACBM or friable suspected ACBM, X = not applicable (material is non-ACBM or nonfriable surfacing or miscellaneous material), None = No assessment category provided in original inspection.

APPENDIX C

SAMPLE REINSPECTION FORM 2:
REINSPECTION OF ACBM: FINDINGS AND MANAGEMENT
PLANNER RECOMMENDATIONS AND
INSTRUCTIONS FOR USING REINSPECTION FORM 2

Sample Reinspection Form 2. Reinspection of ACBM: Findings and Management Planner Recommendations

Page _____ of _____

School _____ Building _____ Date(s) of Reinspection _____

Homogeneous Sampling Area: Material Description _____ ID Number _____

REINSPECTION FINDINGS FOR ACBM						MANAGEMENT PLANNER RECOMMENDATIONS		
Location(s) of ACBM by assessment category	Quantity	Friability	Assessment category (1-7, X)	Justification of assessment category	Change in assessment	Preventive measures, response actions, and initial/additional cleanings	Schedule	
							Begin	Complete
		F NF			Yes No			
		F NF			Yes No			
		F NF			Yes No			
Were additional samples of this ACBM collected? Yes No						Date of management planner review: _____		
Inspector name _____ Inspector signature _____ Accreditation #/State _____ Expiration date _____						Management planner name _____ Management planner signature _____ Accreditation #/State _____ Expiration date _____		
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____								

SAMPLE REINSPECTION FORM 2: REINSPECTION OF ACBM FINDINGS AND MANAGEMENT PLANNER RECOMMENDATIONS

Instructions For Use

Use Form 2 to record information about a single homogeneous sampling area of ACBM. Complete a separate Form 2 for each different ACBM observed. Note, however, that this form does not fulfill all requirements for a reinspection under AHERA.

The inspector, management planner, and designated person each have a role in completing this form. The inspector completes the left-hand portion of the form as described below on pages C-3 to C-6. The management planner completes the right-hand portion of the form as described on pages C-7 to C-8. The designated person completes the bottom row of the form as described on page C-9. A completed Form 2 is presented on page C-10 to aid in understanding these instructions.

School

Enter the name of the school to be reinspected.

Building

Enter the name of the first building to be reinspected. If there is more than one building at the school, complete a separate set of forms for each building.

Date(s) of Reinspection

Enter the date(s) during which the building reinspection occurs.

Homogeneous Sampling Area: Material Description

Refer to the original inspection information on Form 1 (or other similar source). On Form 2, write the complete, word-for-word description of one asbestos-containing homogeneous sampling area observed in the first room. It is important to differentiate similar homogeneous areas of material at this point, e.g., 2x4 white lay-in ceiling tile (or panels) versus 2x4 off-white ceiling tile.

Homogeneous Sampling Area - ID Number

If the management plan assigns identification numbers to the asbestos-containing homogeneous sampling area, record the number in the space provided. If identification numbers were not assigned, enter "X" in this block.

Locations of ACBM by assessment category

Record each room/area where you observe the material during the reinspection. It is preferable to list each individual room/area where the material is present, one to a row, in this column. However, grouping rooms is acceptable as long as it is clear which rooms are included in the grouping. Each room/area in a group must receive the same assessment category. For example, recording "Rooms #101-110" is acceptable if (1) all 10 rooms contain the material, (2) all material is in the same condition, and (3) all material has the same potential for damage. Maintaining the same groupings of rooms as used in the original inspection may ease comparison between assessments and reassessments.

If the designated person has requested that the inspector mark a floorplan with the location of each material, do that now.

Quantity

If the reinspection will re-estimate material quantities or report them on a room by room basis, measure the dimensions of the material in the room/area and record in the space provided. If the reinspection will not re-estimate quantities, enter "X" in the space provided.

Friability

Touch the material as required to make the friability determination for the room/area. Circle "F" if the material is friable, or "NF" if it is nonfriable.

Assessment category

Assign the appropriate assessment category 1-7 to friable ACBM and all asbestos-containing TSI. Enter the number in this column. If you are segregating the material into two or more assessment categories, write each number in a separate row adjacent to the room/area descriptions appropriate to the assessment (note the three assessment categories assigned the 1x1 ceiling tile on the completed example of Sample Form 2).

If the material is nonfriable surfacing or miscellaneous ACBM, enter "X" in this column (see row 1 on the completed example of Sample Form 2).

Justification of assessment category

Briefly describe the rationale for assigning the assessment category, mentioning the cause of any damage or potential for damage. The justification is particularly important if a change in the assessment has occurred.

Some inspection companies use specialized assessment forms to record the factors they consider in assigning the assessment category. Many have a decision tree leading the inspector to the assigned assessment category based on the information from the assessment form. These forms are acceptable alternatives to the written justification used on Form 2. If you use these forms, write "see assessment form(s)" in this column and attach the completed forms.

Change in assessment

Compare the AHERA inspection assessment data on Form 1 (or equivalent) for the material in the location selected. If there is a difference between the original and the reinspection assessment, circle "Yes". If no difference was noted, circle "No".

If different spatial units are used for the reassessments, consider whether substantive changes have actually occurred to the material in the selected location and circle "Yes" or "No" accordingly.

When all ACBM in the selected room/area has been reinspected, go to the next room/area and repeat as above until each room listed in the original EPA inspection as having ACBM has been reinspected.

Continue to the next row on Form 2 and record each location in which an ACBM is observed. Use more than one Form 2 when there are more than three locations of an ACBM with different assessment categories in a building. Number all pages when all rooms/areas have been reinspected. Count the number of pages for each ACBM, then number page 1 of 2, page 2 of 2, and so forth.

Before leaving a room/area, perform an inspection for previously unidentified materials if designated person has requested one.

Were additional samples of this ACBM collected?

If additional bulk samples of the ACBM are collected, circle "Yes". This is a flag to the management planner and designated person to look for the bulk sample records and laboratory analysis results. If no bulk samples of the ACBM were collected, circle "No."

Inspector name

Clearly print your name.

Inspector signature

Sign your name.

Accreditation #/State

Record your AHERA inspector accreditation number and state of accreditation, if applicable.

Expiration date

Record the expiration date of your accreditation. This date must be later than the date of the reinspection.

Submit the reinspection form(s) to the designated person who will submit it to the management planner for recommendations for response actions.

The management planner completes the right-hand portion of Sample Form 2. The management planner may need to visit the building or take other actions to determine appropriate response actions. This should be done before completing the form, as required.

Preventive measures, response actions and initial/additional cleanings

Review the results of the reinspection of each ACBM in each room/area and recommend the appropriate response actions including preventive measures. Consider whether initial cleaning should be performed around newly friable ACBM and whether additional cleaning is required for materials which remain friable.

Schedule/Begin

Specify a schedule for beginning the recommended response action. You may have to discuss the best time for activities, such as removal, with the designated person.

Schedule/Complete

Specify a schedule for completing the recommended response action. You may need to consult the designated person or a project designer to determine a feasible time frame for certain activities, such as removal.

Date of management planner review

Record the date on which you reviewed the reinspection findings and made the recommendations for response actions.

Management planner name

Clearly print your name.

Management planner signature

Sign your name.

Accreditation #/State

Record your AHERA management planner accreditation number and State of accreditation, if applicable.

Expiration date

Record the expiration date of the accreditation. This date should be later than the date of the reinspection.

Once the recommended response action for each ACBM in each location is recorded, submit reinspection forms to the designated person.

The AHERA designated person fills in the bottom line of Sample Form 2.

I, the LEA's Designated Person, have read and understood the recommendations made above:

Sign Form 2 where indicated as acceptance of the completed reinspection document. Prepare a separate statement indicating your agreement with the recommendations made and the reason(s) for your determination. Provide the LEA's schedule for implementation in this statement.

Date

Date your signature.

Include the completed reinspection forms in each copy of the management plan for the school.

COMPLETED EXAMPLE

Sample Reinspection Form 2. Reinspection of ACBM: Findings and Management Planner Recommendations

School Lafayette Elementary Building Classroom Building 2 Date(s) of Reinspection 10-14-91

Homogeneous Sampling Area: Material Description 1x1 Ceiling Tile ID Number HA-02

REINSPECTION FINDINGS FOR ACBM						MANAGEMENT PLANNER RECOMMENDATIONS		
Location(s) of ACBM by assessment category	Quantity	Friability	Assessment category (1-7, X)	Justification of assessment category	Change in assessment	Preventive measures, response actions, and initial/additional cleanings	Schedule: Begin	Schedule: Complete
Hallway A	1200SF	F / (NF)	X	Encapsulation in good condition-nonfriable	Yes / No	Monitor encapsulant during periodic surveillance and repair any damage observed per O+M procedures.	November 15, 1992	Upon removal of all tile from area
Hallway A- North Entry Foyer	20SF	(F) / NF	4	Fingermarks around exit sign - significant damage	Yes / No	Isolate entry area and remove at least 20 damaged tiles following project designer specs.	November 15, 1992	prior to further occupancy
Hallway B	1200SF	(F) / NF	5	This hall does not appear to have been encapsulated in 12/88	Yes / No	Encapsulate tiles following project designer specs. Limit access to K-3 students only.	June 1, 1992	August 1992

Were additional samples of this ACBM collected? Yes (No)

Date of management planner review: 10-21-91

Inspector name Jane Smith

Inspector signature Jane Smith

Accreditation #/State COI 123 - Colorado

Expiration date 12-30-91

Management planner name Tom Brown

Management planner signature Tom Brown

Accreditation #/State COM 921 - Colorado

Expiration date 1-15-92

I, the LEA's Designated Person, have read and understood the recommendations made above J. B. Williams Date: 11/14/91

APPENDIX D

ANSWERS TO THE MOST FREQUENTLY ASKED QUESTIONS ABOUT REINSPECTIONS UNDER THE AHERA ASBESTOS-IN-SCHOOLS RULE

Answers to the *Most Frequently Asked Questions* About Reinspections

Under the AHERA Asbestos-In-Schools Rule

This document has been prepared in response to the many inquiries that have been received by the Environmental Protection Agency (EPA) concerning the reinspection requirements and related provisions of the Asbestos Hazard Emergency Response Act (AHERA) regulations.

The answers developed here represent the Agency's responses to the most frequently asked questions on this subject. We believe most problem areas have been addressed. However, it is likely that additional questions will occur as the reinspection cycle gets underway. This document is not intended to cover every conceivable query about the reinspection process. It should be used as an adjunct to the AHERA rule for additional clarification of the regulations.

Any questions not answered by this document can be referred to the appropriate Regional Asbestos Coordinator listed on the last page or the EPA Toxics Hotline in Washington, D.C. at 202/554-1404.

Office of Toxics Substances
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency
Washington, D.C. 20460

May, 1991

REINSPECTIONS

Questions & Answers

Question 1: *By what date must an LEA have had its school reinspected?*

Answer: Under AHERA, school buildings must be reinspected every three years. The first triennial reinspection must occur within three years after a management plan is in effect [See Section 763.85(b)]. Each LEA was required to develop a management plan no later than May 9, 1989. Implementation of the plan was required to begin by July 9, 1989. Therefore, the first round of three year reinspections must be completed by July 9, 1992.

Question 2: *If implementation of the management plan began prior to July 9, 1989, must the reinspection take place within three years of the actual date the plan was first implemented?*

Answer: YES. The original management plan should have contained reinspection guidelines. These guidelines should have emphasized that as part of implementing the management plan, all reinspection information must be incorporated into the document. If implementation of a management plan began prior to July 9, 1989, the first reinspection should take place within three years of the date the plan was first implemented. However, since implementation of all management plans had to begin no later than July 9, 1989, if the date when implementation first occurred cannot be specifically ascertained, reinspection must take place no later than July 9, 1992.

Question 3: *If a management plan was first implemented on January 10, 1989 and the LEA had a reinspection on January 10, 1992, could the second reinspection date be extended to July 9, 1995, or would it have to be done by January 10, 1995?*

Answer: Section 763.85 (b) requires reinspections to be done "at least once every three years." Therefore, the next triennial reinspection would have to be done on or before January 10, 1995, within three years of the first reinspection.

Question 4: *If the original inspection overlooked some asbestos-containing building materials (ACBM) or if some areas of the building were not accounted for in the first inspection, must the reinspection include the inspection, assessment and documentation of these overlooked areas?*

Answer: NOT REQUIRED by regulation BUT STRONGLY RECOMMENDED BY EPA. While it is not an AHERA requirement, we strongly urge all schools to reinspect those areas or

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materials in their buildings that may have been overlooked in their initial school inspections.

As a result of an EPA-sponsored AHERA evaluation study and various enforcement activities, it was discovered that, in the original inspections, certain categories of ACBM were frequently missed by inspectors and do not appear in many management plans. Therefore, inspectors conducting reinspections should make sure that materials such as ceiling tile, wallboard, plaster walls, linoleum, fire doors, duct insulation and vibration dampening cloth, which are considered suspect ACBM, are identified and included in the management plan.

The regulations regarding reinspections impose no requirement beyond reinspecting the materials and areas covered in the original inspection, plus any additional materials discovered subsequent to the original inspection; that is, reinspection encompasses "all friable and nonfriable known or assumed ACBM." [Section 763.85(b)(3)(i)]. EPA strongly recommends, however, that the reinspection be thorough so that any deficiencies in the original inspection will be addressed in the reinspection. Any actual or assumed ACBM not previously identified that is discovered during reinspection (or periodic surveillance) should be included in an update to the management plan. The update must include a management planner's recommendations for appropriate response actions based on an accredited inspector's assessment [See Section 763.88(d)].

Question 5: *If the time interval for a 6 month periodic surveillance inspection should coincide with the date for the reinspection, can the reinspection also satisfy the periodic surveillance requirement?*

Answer: YES, since reinspection includes everything that would be covered in the 6 month surveillance.

Question 6: *Is reinspection required for buildings in which no ACBM, known or assumed, was found in the original inspection, or where abatement subsequent to the original AHERA inspection removed all ACBM?*

Answer: NO. Since the AHERA rule confines the reinspection to "all friable and nonfriable known or assumed ACBM," reinspection is not required for buildings which contain no ACBM. However, in accordance with Sections 763.93(d) and (e), management plans should document the asbestos removal as a response action activity in accordance with Sections 763.94(b) and (g); or, if applicable, contain an inspection report or architect's statement that the building is asbestos-free; or that no ACBM was specified in its construction [see Sections 763.99(a)(6) and (7)]. Schools that have conducted asbestos abatement to remove all ACBM should conduct a reinspection in case some ACBM was missed. In addition, LEAs must

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continue to appoint a "designated person," retain their management plans indefinitely, and provide annual written notification to parent, teacher, and employee organizations of the availability of the plan.

Question 7: *Will areas of newly friable ACBM or assumed ACBM be required to undergo initial cleaning in accordance with Section 763.91?*

Answer: YES. If upon reinspection (or during a periodic surveillance) the condition of ACBM or assumed ACBM has changed from the original AHERA inspection to friable from nonfriable, and the building has not been cleaned since the original inspection, the following requirements as stated in Section 763.91(c)(1) will apply: "Initial cleaning. Unless the building has been cleaned using equivalent methods within the previous 6 months, all areas of a school building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by Section 763.85(a) and before the initiation of any response action, other than O & M activities or repair... ."

Question 8: *AHERA requires that an an accredited management planner review the results of each inspection and assessment. Is this also required for reinspections?*

Answer: YES. Section 763.88(d) states that "the local education agency shall select a person accredited to develop management plans to review the results of each inspection, reinspection, and assessment for the school building and to conduct any other necessary activities in order to recommend in writing to the local education agency appropriate response actions."

The review and response action recommendations are particularly important if assessments of known or assumed ACBM have changed from the initial AHERA inspection, or if known or assumed ACBM, previously identified as nonfriable, has become friable.

Question 9: *Must an LEA reinspect a building that is no longer in use as a school?*

Answer: NO. Section 763.85(b)(1) indicates that LEAs shall conduct a reinspection in buildings that they "lease, own, or otherwise use as a school building." However, if the building is not being used as a school at the time its reinspection would have occurred (even if the LEA continues to lease or own the building), the LEA must be able to certify that it is no longer using the building as a school. In addition, if an LEA has stopped using a building as a school, and later decides to use the building as a school, it must be reinspected in accordance with Section 763.85(b).

Question 10: *When must an LEA reinspect a school brought into service after October 12, 1988?*

Answer: Section 763.85(a)(2) requires inspection of schools brought into service after October 12, 1988 prior to use of a building as a school. Section 763.93(a)(3) requires submission of a management plan for such schools to the Governor prior to use of the building. The management plan of a school building brought into service after October 12, 1988 would be in effect 90 days after submission of the plan to the State Governor unless the plan is disapproved. Reinspection must occur within 3 years of the date the plan is in effect, that is, 90 days after submission to the Governor.

Question 11: *What reinspection records must be included in the management plan?*

Answer: In accordance with Section 763.85(b)(3)(vii), the following records must be included:

- The date of the reinspection, the name and signature of the person making the reinspection, State of accreditation, and, if applicable, his or her accreditation number.
- Any changes in the condition of known or assumed ACBM.
- The exact locations where samples were collected during the reinspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation and, if applicable, his or her accreditation number.
- Any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, State of accreditation, and if applicable, his or her accreditation number.

In addition, the written recommendations of the management planner must be included in the management plan [See Section 763.88(d)].

Question 12: *How should assessments or reassessments made as a result of the reinspection be documented?*

Answer: Sections 763.88(a)(1) and (2) require that the accredited inspector provide a written assessment of all known or assumed friable ACBM in the school building, and submit a copy of the assessment to the designated person within 30 days of the assessment. If there is no change in the material from the initial inspection, the accredited person can simply refer to the initial assessment.

Question 13: *What are the necessary components of an AHERA reinspection?*

Answer: An accredited inspector should visually reinspect and reassess the condition of all known or assumed friable ACBM; visually inspect previously considered nonfriable ACBM and touch it to determine if it has become friable; identify homogeneous areas of material that have become friable since the last inspection; develop required records (detailed in the Answer to Question 11) and submit such records to the LEA's designated person within 30 days of reinspection.

Question 14: *What are the required qualifications for the persons involved in the reinspection?*

Answer: The person conducting the reinspection must be accredited under AHERA as an inspector, and his/her accreditation must be current for the period in which the reinspection takes place. The management planner responsible for the review of the results of the reinspection and recommendations for response actions must be accredited as a management planner under AHERA and his/her accreditation must be current for the period in which the review of the reinspection takes place.

Question 15: *When the management plan is revised as a result of the reinspection, does the updated plan have to be resubmitted to the State?*

Answer: NO. A management plan has to be submitted to the Governor of the State when it is first developed. AHERA does not require subsequent updates or other changes to the plan to be submitted to the State.

APPENDIX E

GLOSSARY OF TERMS

GLOSSARY OF TERMS

ACBM	Asbestos-containing building material, which includes surfacing material, thermal system insulation, or miscellaneous material that is found in or on interior structural members or other parts of a building.
ACBM Condition	**Good:** No visible damage or deterioration, or showing only very limited damage or deterioration. **Damaged:** Physical injury or deterioration such that the internal structure of the material is inadequate, material which has delaminated such that its bond to the substrate is inadequate, or which lacks fiber cohesion or adhesion properties for any other reason. Thermal system insulation (TSI) is considered damaged when it is lacking part or all of its covering. Such damage may be shown by the separation of ACM into layers; flaking, blistering, or crumbling; water damage or stains; scrapes, mars or gouges; exposed TSI beneath its covering. **Significantly Damaged:** Damage that is extensive and severe.
Administrator (EPA)	The person appointed by the President to run the EPA.
AHERA	The Asbestos Hazard Emergency Response Act. This Act was signed into law on October 22, 1986 by President Reagan. It established the framework for a regulation which requires, among other things, that elementary and secondary schools identify asbestos-containing materials in school buildings, institute programs aimed at minimizing the risk of asbestos exposure in those buildings, and reinspect those materials at least every 3 years.
AHERA regulation/rule	40 CFR 763, Asbestos-Containing Materials in Schools: Final Rule and Notice, U.S. Environmental Protection Agency, February, 1987.

AHERA 1-7 Categories

Seven categories defined in the AHERA regulations, one of which must be assigned to each friable surfacing and miscellaneous ACBM and each asbestos-containing TSI during an inspection or reinspection.

1. Damaged or significantly damaged TSI ACBM.
2. Damaged friable surfacing ACBM.
3. Significantly damaged friable surfacing ACBM.
4. Damaged or significantly damaged friable miscellaneous ACBM.
5. ACBM with potential for damage.
6. ACBM with potential for significant damage.
7. Any remaining friable ACBM or friable suspected ACBM.

AHERA Designated Person/Designated Person

Person designated by the Local Education Agency to ensure that the AHERA requirements are properly implemented.

Asbestos

Naturally-occurring fibrous mineral used in many building materials, primarily for fireproofing, thermal system insulation, sound insulation, and decoration.

Asbestos-containing

Any material, when referring to school buildings, which contains more than one percent asbestos.

Assessment

Evaluation of the physical condition and potential for damage of all friable ACBM and asbestos-containing thermal system insulation. AHERA requires classification of each ACBM assessed into one of seven categories based on material type and damage/potential for damage.

Assumed ACBM

Suspect building material that has not been sampled and analyzed for asbestos content and must, therefore, be treated as an ACBM by the LEA.

Bulk Sample

A small portion (usually about thumbnail size) of a suspect asbestos-containing building material collected by the inspector for laboratory analysis to determine asbestos content.

Completed Reinspection	The entire process of the visual examination and assessment of known and assumed ACBM in a school building; recommended response actions by the management planner; and submission of reinspection findings and recommendations to the designated person. Reinspections are required by AHERA every 3 years after management plan implementation.
Current Accreditation	Having successfully completed an EPA-approved accreditation or refresher course within 1 year of the reinspection (for inspectors) or the management plan review (for management planners.)
Encapsulation	Treatment of asbestos-containing material with a liquid that covers the surface with a protective coating or embeds fibers in an adhesive matrix to prevent the release of asbestos fibers.
Enclosure	An airtight, impermeable, permanent barrier around asbestos-containing material to prevent the release of fibers.
EPA	U.S. Environmental Protection Agency.
Evaluation Study	An EPA report entitled **Evaluation of the Asbestos Hazard Emergency Response Act (AHERA)**
Exclusion	One of several situations which permits the LEA to delete one or more of the items required by AHERA. For example, records of previous sample collection and analysis may be used by the accredited inspector in lieu of AHERA bulk sampling.
Exterior Areas	Subdivision of areas of a building with one or more walls open to the outside, such as covered walkways or porticos.

Form	Any document the inspector uses to record information for the reinspection, or for inspection of previously unidentified materials. Two forms were developed for this reinspection guide: Sample Reinspection Form 1. Original AHERA Inspection Information Abstracted from the Management Plan. Sample Reinspection Form 2. Reinspection of ACBM: Findings and Management Planner Recommendations.
Friable	When referring to a school building, material that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. Includes previously nonfriable material after it becomes damaged to the extent that, when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure.
Functional Space	Under AHERA, a room, group of rooms, or homogeneous area designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.
HEPA	High efficiency particulate air. A special type of filter used in equipment for removing asbestos fibers, e.g., vacuums, air filtration devices.
Homogeneous Sampling Area	In accordance with AHERA definitions, an area of surfacing material, TSI, or miscellaneous material that is uniform in color and texture.
HVAC	Heating, ventilation and air-conditioning systems in a building.
Identified Material	Any AHERA-defined suspect material found during the original AHERA inspection that was also recorded in the management plan for the building.

Local Education Agency (LEA)	An educational agency at the local level that exists primarily to operate schools or to contract for educational services for elementary and secondary public and non-profit private schools. For non-profit private schools, this includes the building owner.
Management Plan	A document that each Local Education Agency is required to prepare under AHERA regulations. It describes all activities planned and undertaken by a school to comply with AHERA regulations, such as building inspections to identify asbestos-containing materials, response actions, and operations and maintenance programs to minimize the risk of exposure to asbestos in school buildings.
Material Category	Broad classification of suspect materials into TSI, surfacing material, and miscellaneous material.
Miscellaneous Material	Interior building material on structural components, such as floor or ceiling tiles. Does not include TSI or surfacing material.
NESHAP	National Emission Standards for Hazardous Air Pollutants, EPA rules under the Clean Air Act.
Nonfriable	Material that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
Operations and Maintenance Program (O&M)	Program of work practices to maintain friable ACBM in good condition, ensure cleanup of asbestos fibers previously released, and prevent future release by minimizing and controlling friable ACBM disturbance or damage.
Original AHERA Inspection/Original Inspection	Examination of school buildings arranged by Local Education Agency, pursuant to AHERA, to initially identify asbestos-containing materials, evaluate the condition of those materials, and take samples of materials suspected to contain asbestos. Inspections are performed by inspectors accredited by the EPA or by EPA-approved State accreditation programs.

Periodic Surveillance	A visual examination for any change in material condition of ACBM and assumed ACBM in a school building. AHERA requires a periodic surveillance at least once every 6 months.
Previously Unidentified Material	Any AHERA-defined suspect material present in a building at the time of the original AHERA inspection that is not reported in the management plan.
Recorded Location	An area in which a suspect material was present during the inspection, and which is indicated in the management plan as having the material present.
Reinspection	The re-examination, by an accredited inspector, of a school building for which an original AHERA inspection was previously performed, including a re-evaluation and response action recommendations by an accredited management planner. Reinspection of school buildings containing ACBM is required by AHERA regulations at least once every 3 years.
Removal	Taking out or stripping ACBM from an area, a functional space, or a homogeneous area.
Repair	Procedures used to patch or cover damaged asbestos-containing materials, other than enclosure or encapsulation. Examples include covering the damage with plastic sheeting, duct tape, or plaster.
Resilient Sheet Flooring/ Linoleum	A type of floor covering which is preformed in long sheets. Generally, the sheets are unrolled and secured to the floor with an adhesive. These commonly have a vinyl-based upper surface. The backing may contain asbestos.
Response Actions	Methods, including removal, encapsulation, enclosure, repair, and operations and maintenance, that protect human health and the environment from friable ACBM.

Room/Area	A well-defined space within a building, generally a distinct room, but also a hall, crawlspace, or other distinct space. This term may refer to the entire homogeneous sampling area or to a functional space but is generally a subset of these.
School Building	Any structure essential to the operation of a school and under the authority of the LEA, including classrooms, student housing, athletic facilities, administrative areas, garages, and maintenance areas. Several buildings may be present at one school.
Surfacing Material	Material sprayed or troweled onto structural members (beams, columns, or decking) for fire protection; or on ceilings or walls for fireproofing, acoustical or decorative purposes. Includes fireproofing, textured plaster, and other textured wall and ceiling surfaces.
Suspect Material	Building material suspected to contain asbestos because of past practices in its manufacture and use. Includes surfacing material, gypsum wallboard (also called sheetrock or drywall), floor tile, ceiling tile, thermal system insulation, and miscellaneous other materials. Suspect materials are classified as ABCM or non-ACBM by analyzing bulk samples to determine asbestos content.
Total Amount	Estimated amount (in square or linear feet) of suspect material in a building/s at the time of the original AHERA inspection.
TSI	Thermal system insulation. Material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.
Underestimated Quantity	The difference between the total amount of a suspect material found during the Evaluation Study and the amount of the same material recorded in the management plan, when the latter quantity is less than 80 percent of the former.

Vibration Dampening Cloth (VDC)	Cloth commonly found on ductwork where duct size changes, used to reduce noise.
Wallboard	Generic term for any wall surface installed as sheets, rather than applied wet. Includes gypsum wallboard (also called sheetrock or drywall), transite panels, etc.

APPENDIX F

REFERENCES

REFERENCES

These documents can be obtained from the Toxic Substances Control Act (TSCA) Hotline by calling (202) 554-1404.

USEPA. 1991. U.S. Environmental Protection Agency. *Asbestos in Schools: Evaluation of the Asbestos Hazard Emergency Response Act (AHERA): A Summary Report.* June, 1991.

USEPA. 1990. U.S. Environmental Protection Agency. *Managing Asbestos In Place: A Building Owner's Guide to Operations and Maintenance Programs for Asbestos-Containing Materials.* July, 1990. ("Green Book")

USEPA. 1987. U.S. Environmental Protection Agency. *Asbestos-Containing Materials in Schools: Final Rule and Notice.* 40CFR763. February, 1987.

USEPA. 1988. U.S. Environmental Protection Agency. *100 Commonly Asked Questions about the New AHERA Asbestos-in-Schools Rule.* May, 1988.

USEPA. 1985. U.S. Environmental Protection Agency. *Asbestos in Buildings: Simplified Sampling Scheme for Surfacing Materials.* Washington, DC, EPA 560/5-85-030A. ("Pink Book")

USEPA. 1985. U.S. Environmental Protection Agency. *Guidance for Controlling Asbestos-Containing Materials in Buildings.* Washington, DC, EPA 560/5-85-024. ("Purple Book")

APPENDIX G

PULL-OUT COPIES OF:

1. SAMPLE REINSPECTION FORM 1: ORIGINAL AHERA INSPECTION INFORMATION ABSTRACTED FROM THE MANAGEMENT PLAN

2. SAMPLE REINSPECTION FORM 2: REINSPECTION OF ACBM: FINDINGS AND MANAGEMENT PLANNER RECOMMENDATIONS

3. RECOMMENDED REINSPECTION CHECKLIST FOR THE AHERA DESIGNATED PERSON-PLANNING FOR THE REINSPECTION

4. RECOMMENDED REINSPECTION CHECKLIST FOR THE INSPECTOR

5. RECOMMENDED REINSPECTION CHECKLIST FOR THE MANAGEMENT PLANNER

6. RECOMMENDED REINSPECTION CHECKLIST FOR THE AHERA DESIGNATED PERSON-RECORDKEEPING

7. RECOMMENDED SAMPLE REINSPECTION NOTIFICATION LETTER

Sample Reinspection Form 1. Original AHERA Inspection Information Abstracted from the Management Plan

School _____ Building _____ Date(s) of Original AHERA Inspection _____

Homogeneous sampling areas		Material category	Asbestos content	Friability	AHERA assessment category (1-7, X, None)	Recorded locations of material for each assessment category	Response actions taken/ renovations/other comments
ID number	Material description						
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			
		TSI Surf. Misc.	Assumed Yes No	F NF X			

Information abstracted by _____ Date _____

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA assessment category: 1 = Damaged or significantly damaged TSI ACBM, 2 = Damaged friable surfacing ACBM, 3 = Significantly damaged friable surfacing ACBM, 4 = Damaged or significantly damaged friable miscellaneous ACBM, 5 = ACBM with potential for damage, 6 = ACBM with potential for significant damage, 7 = Any remaining friable ACBM or friable suspected ACBM, X = not applicable (material is non-ACBM or nonfriable surfacing or miscellaneous material), None = No assessment category provided in original inspection.

Sample Reinspection Form 2. Reinspection of ACBM: Findings and Management Planner Recommendations

Page _____ of _____

School _____ Building _____ Date(s) of Reinspection _____

Homogeneous Sampling Area: Material Description _____ ID Number _____

REINSPECTION FINDINGS FOR ACBM						MANAGEMENT PLANNER RECOMMENDATIONS		
Location(s) of ACBM by assessment category	Quantity	Friability	Assessment category (1-7, X)	Justification of assessment category	Change in assessment	Preventive measures, response actions, and initial/additional cleanings	Schedule	
							Begin	Complete
		F NF			Yes No			
		F NF			Yes No			
		F NF			Yes No			
Were additional samples of this ACBM collected? Yes No						Date of management planner review: _____		
Inspector name _____ Inspector signature _____ Accreditation #/State _____ Expiration date _____						Management planner name _____ Management planner signature _____ Accreditation #/State _____ Expiration date _____		
I, the LEA's Designated Person, have read and understood the recommendations made above: _____ Date: _____								

Recommended Reinspection Checklist for the AHERA Designated Person-Planning for the Reinspection

- ☐ 1. Select the inspector(s) and management planner to perform reinspection activities; obtain proof of their current accreditations.

- ☐ 2. Determine the scope of work.
  - ☐ 2a. Clarify which buildings are to be included in the reinspection. Determine whether each building is used as a school building.
  - ☐ 2b. Determine whether previously grouped, similar materials (e.g., all floor tile) should be separated into distinct materials.
  - ☐ 2c. Determine whether previously assumed ACBM should be bulk sampled. Determine whether other bulk samples should be collected.
  - ☐ 2d. Determine whether quantities of ACBM should be re-estimated.
  - ☐ 2e. Determine whether the inspector should look for previously unidentified suspect materials. (Highly recommended by the EPA.)

- ☐ 3. Determine how the reinspection results will be reported.
  - ☐ 3a. Determine whether locations of ACBM should be reported on a room-by-room basis, rather than by a building or homogeneous sampling area basis.
  - ☐ 3b. Determine whether a floorplan or written description, or both, will be used to locate ACBM.
  - ☐ 3c. Determine whether ACBM will be assessed on a room by room, homogeneous sampling area, or some other basis.
  - ☐ 3d. Determine whether photographs or videotape will be used to document material condition.

Recommended Reinspection Checklist for the Inspector

Planning for the reinspection field activities

- ☐ 1. Review the items on the Reinspection Checklist for the AHERA Designated Person - Planning for the Reinspection.
- ☐ 2. Select the field forms to be used (reinspection, reassessment, inspection, bulk sample logs, photograph logs, chain of custody, floorplans).
- ☐ 3. Review the management plan for the school (see Sample Reinspection Form 1 in Appendix B).
  - ☐ 3a. Obtain or generate a list of all ACBMs and non-ACBMs (and associated identification numbers, if provided) and material categories reported during the original inspection.
  - ☐ 3b. Record the sample results for each homogeneous sampling area of suspect material.
  - ☐ 3c. Record all reported locations of material (descriptions and/or location diagrams) for each homogeneous sampling area.
  - ☐ 3d. Copy the location diagrams, if possible.
  - ☐ 3e. Record the original inspection assessment category assigned to ACBM in each room/area.
  - ☐ 3f. Record any response actions which have occurred and the location of each.
  - ☐ 3g. Record any renovations which have occurred and the location of each.
  - ☐ 3h. Review records of periodic surveillance.
- ☐ 4. Arrange administrative details - time of inspection, school escort, and keys.
- ☐ 5. Assemble all field materials.
  - ☐ 5a. A supply of all field forms, pens, calculator, tape measure, flashlight, and tools.
  - ☐ 5b. Blank floorplans and inspection location diagrams, if available.
  - ☐ 5c. Bulk sample collection tools and clean-up supplies, if required.
  - ☐ 5d. Personal protective equipment, if needed.
  - ☐ 5e. A ladder, if needed.

Recommended Reinspection Checklist for the Inspector (Continued)

Performing the field activities

- ☐ 6. Meet the school escort.
- ☐ 7. Select the first room/area to be reinspected.
- ☐ 8. Observe and record each ACBM in the selected room/area, referring to the list of homogeneous areas of ACBM and non-ACBM abstracted from the management plan (see Sample Reinspection Form 2).
- ☐ 9. Mark the rooms/areas where each ACBM was observed on the diagram or floorplan (optional).
- ☐ 10. Re-estimate the quantity of each ACBM in the selected room/area (if requested by the designated person).
- ☐ 11. Touch each ACBM in the room/area to determine whether it is friable.
- ☐ 12. Collect additional bulk samples, as instructed by the designated person.
- ☐ 13. Look at the condition and determine the potential for damage or significant damage to each friable ACBM and asbestos-containing TSI in the room/area.
- ☐ 14. Assign a reassessment category to each friable ACBM and asbestos-containing TSI in the room/area.
- ☐ 15. Record the justification of the assigned reassessment category (can use assessment form or notes).
- ☐ 16. Photograph the material, if requested by the designated person.
- ☐ 17. Assess previously unidentified materials in the room/area, if requested by the designated person.
- ☐ 18. Move to next room/area, and repeat as above.

Recordkeeping

- ☐ 19. Complete all field form data items.
- ☐ 20. Record name, signature, date, and accreditation number and State (if applicable) on the reinspection form.

Recommended Reinspection Checklist for the Inspector (Continued)

Recordkeeping (continued)

☐ 21. **If additional bulk samples were collected, include the exact locations where they were taken. Also include a description of the process used to select sample locations, and the name, signature, date, and accreditation number and State (if applicable) of the inspector(s) collecting each bulk sample in each copy of the school's management plan.**

☐ 22. **Submit the results of the reinspection to the AHERA designated person within 30 days after the reinspection is completed. Note, at a minimum, any changes in ACBM assessment.**

Recommended Reinspection Checklist for the Management Planner

Recommendations for response actions

- ☐ 1. Review the results of the original AHERA inspection, periodic surveillance records, and the reinspection.
- ☐ 2. Visit the school or take other necessary actions to recommend response actions to the LEA.
- ☐ 3. For each friable surfacing and miscellaneous ACBM and each asbestos-containing TSI reported by the inspector, make written response action recommendations.
  - ☐ 3a. Describe preventive measures and response actions for each assessment location of the ACBM.
  - ☐ 3b. Consider whether cleaning in accordance with procedures in 40CFR763.91(c) should be performed in each area and make appropriate recommendations in writing.
- ☐ 4. Include a schedule for beginning and completing the recommended cleaning and response actions.
- ☐ 5. Estimate the resource requirements for the recommended response actions.
- ☐ 6. Review the adequacy of the O&M Plan.

Recordkeeping

- ☐ 7. Record name, signature, date, and accreditation number and State (if applicable) on the reinspection form.
- ☐ 8. Submit written recommendations for the response actions to the designated person.

Recommended Reinspection Checklist for the AHERA Designated Person - Recordkeeping

- ☐ 1. Include the reinspection report and recommended response actions in each copy of the school's management plan.
- ☐ 2. Include a written statement indicating agreement or disagreement with the management planner's recommendations for response actions, justification for any disagreement, and an implementation schedule for the response actions in the management plan. (Recommended by the EPA.)
- ☐ 3. Include inspection report findings for any previously unidentified materials (and, if ACBM found, include management planner recommendations) in the management plan.
- ☐ 4. Include a copy of a document describing steps taken to inform workers and building occupants, or their legal guardians, about the reinspection in each copy of the school's management plan.
- ☐ 5. Evaluate the effectiveness of the asbestos operations and maintenance (O&M) program and periodic surveillance. Revise, as appropriate.

Recommended Sample Reinspection Notification Letter

EASTSIDE COMMUNITY PUBLIC SCHOOLS

East Park Avenue
Eastside, CA 91005
(999) 922-3333

Bob Smith, Superintendent

Notification of Asbestos Reinspections

TO: Parents and Staff of Eastside Middle School

FROM: Bob Smith, Superintendent of Schools

DATE: December 15, 1991

In compliance with the U.S. Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA), in the fall of 1988 we performed inspections of each of our school buildings for asbestos-containing building materials. The inspection findings and asbestos management plans have been on file in each school administrative office since that time.

The EPA requires us to perform reinspections of the asbestos materials every three years. During the months of September through November 1991, accredited asbestos inspectors performed these reinspections. An accredited management planner reviewed the results of the reinspections and recommended actions we should take to safely manage each asbestos material in our buildings.

Two significant findings were noted during the reinspection of Eastside Middle School:

- Asbestos-containing water pipe insulation in the kitchen over the dishwasher is slowly deteriorating due to high humidity. The material is scheduled for removal over the Christmas break.

- Linoleum in all bathrooms was not included in the original AHERA inspection. The backing (between the vinyl layer and the floor) is assumed to contain asbestos. The vinyl layer is in good condition and provides an effective barrier, preventing asbestos fiber release. This material has been added to our asbestos maintenance program and we will monitor it for any changes in condition.

All other asbestos materials in this school are in good condition and we will continue to manage them in place, as recommended by the accredited management planner.

The results of the reinspection are on file in the management plan in the school's administrative office. Everyone is welcome to view these anytime during normal school hours (M-F, 8:00 a.m. - 4:30 p.m.). The Asbestos Program Manager, Jill Williams, is available to answer any questions you may have about asbestos in our buildings at (999) 922-3334.

APPENDIX H

MESSAGE FROM THE ADMINISTRATOR OF EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 6 1991

THE ADMINISTRATOR

An Advisory to the Public on Asbestos in Buildings:

The Facts About Asbestos in Buildings

In recent months, there have been a number of scientific and news reports about asbestos in buildings. Unfortunately, some of these may have confused, rather than enlightened, the public about the potential health risks of asbestos exposure and the Environmental Protection Agency's (EPA) policies regarding asbestos in schools and other buildings.

I want to summarize the EPA's policies for asbestos control in schools and other buildings. I am providing this summary in the form of five major facts that the Agency has presented in congressional testimony.

FACT ONE: Although asbestos is hazardous, human risk of asbestos disease depends upon exposure.

Asbestos is known to cause cancer and other diseases if asbestos fibers are inhaled into the lung and remain there. This conclusion is based upon studies involving human exposure, particularly exposure at high levels. A recent Science magazine article indicated exposure to chrysotile (common "white" asbestos) may be less likely to cause some asbestos-related diseases. Although there is more evidence of hazard for some types of asbestos, EPA believes there is reason to be concerned about other types, such as chrysotile, for which the data are less conclusive. Based on careful evaluation of available scientific evidence, EPA has adopted a prudent approach in its regulations of assuming that all fibers are of equal concern. Various scientific and regulatory organizations, including the National Academy of Sciences, support EPA's more protective regulatory approach.

It is important to stress that the mere presence of a hazardous substance, such as asbestos on an auditorium ceiling, no more implies that an asbestos-related disease will develop than a poisonous substance in a medicine cabinet or under a kitchen sink implies that a poisoning will occur. Asbestos fibers must be released from the material in which they are contained, and an individual must breathe those fibers in order to incur any chance of disease.

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While scientists have been unable to agree on a level of asbestos exposure at which we, as public policy makers, can confidently say, "there is no risk," this does not mean that all or any exposure is inherently dangerous. To the contrary, almost every day we are exposed to some level of asbestos fibers in buildings or in the outdoor air. Based upon available data, very few among us, given existing regulatory controls, have contracted or will ever contract an asbestos-related disease from these relatively low levels of airborne fibers found in buildings. The present scientific evidence will not allow us to state unequivocally that there is a level of exposure below which there is a zero risk, but the risk at these low levels in fact could be negligible or even zero. The risks of asbestos disease can be higher from exposures that occur during mining, manufacturing, and use of some remaining asbestos products, for example, in the repair of automotive brakes.

FACT TWO: **Prevailing asbestos levels in buildings** -- the levels that school children and you and I face as building occupants -- **seem to be very low**, based upon available data. **Accordingly, the health risk we face as building occupants also appears to be very low.**

Indeed, a 1987 EPA study found that airborne fiber levels in a segment of Federal buildings with asbestos management programs were so low that the levels were in a range comparable to levels outside these buildings. While the data are not conclusive and we are seeking more information through a major research effort, the 1987 study appears to suggest that building occupants face only a minimal risk when their buildings have active asbestos management programs. Severe health problems attributed to asbestos exposure have generally been experienced by workers in industries such as shipbuilding, where they were constantly exposed to very high fiber levels in the air, often without any of the worker protections now afforded to them under the law. Of course, some building workers, if they are not properly trained and protected, may disturb asbestos-containing materials and, in so doing, increase the risk to themselves and others.

FACT THREE: **Removal is often not a school district's or other building owner's best course of action to reduce asbestos exposure.** In fact, an improper removal can create a dangerous situation where none previously existed.

It is important to understand that, for most situations, EPA's asbestos regulations for schools under the Asbestos Hazard Emergency Response Act (AHERA) do not require removal of asbestos. These regulations allow the school to decide whether asbestos removal, or some other response action, is the best option to protect the health of school students and employees. In general, asbestos removal is most appropriate when asbestos materials, such as pipe or boiler insulation, are damaged beyond repair.

Although we believe most asbestos removals are being conducted properly, asbestos removal practices by their very nature disturb the material and significantly elevate airborne fiber levels. Unless all safeguards are properly applied and strictly followed, exposure in the building can rise, perhaps to levels where we know disease can occur. Consequently, an ill-conceived or poorly conducted removal project can actually increase rather than eliminate risk.

FACT FOUR: EPA only requires asbestos removal in order to prevent significant public exposure to asbestos, such as during building renovation or demolition.

Prior to a major renovation or demolition, asbestos material that is likely to be disturbed or damaged to the extent that significant amounts of asbestos would be released must be removed using approved practices under EPA's asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation. Demolishing a building containing large amounts of asbestos, for example, would likely result in significantly increased exposure and could create an imminent hazard. Clearly, asbestos removal before the wrecking ball swings into action is appropriate to protect public health. However, this cannot be said of arbitrary asbestos removal projects, which, as noted above, can actually increase health risk unless properly performed. This, in part, is why EPA has not mandated asbestos removal from schools or other buildings beyond the NESHAP requirement, which has the effect of gradually and rationally taking all remaining asbestos building materials out of the inventory.

FACT FIVE: EPA does recommend in-place management whenever asbestos is discovered.

Instead of removal, a conscientious in-place management program will usually control fiber releases, particularly when the materials are not significantly damaged and are not likely to be disturbed. That is why Congress mandated such a program in schools through AHERA.

In-place management, of course, does not mean "do nothing." It means, first, that the building owner or manager should identify asbestos, through a building-wide inventory or on a case-by-case basis before suspect materials are disturbed by renovations or other actions. The AHERA program requires an inventory of all asbestos materials in schools by properly accredited individuals.

After the material is identified, the school's personnel, building owner or manager can then institute controls to ensure that the day-to-day management of the building is carried out in a manner that prevents or minimizes the release of asbestos fibers into the air. These controls will ensure that when asbestos fibers are released, either accidentally or intentionally, proper management and cleanup procedures are implemented.

Another concern of EPA and other Federal, State and local agencies which regulate asbestos is to ensure proper worker training and protection. Maintenance and service workers in buildings, in the course of their daily activities, may disturb materials and can thereby elevate asbestos fiber levels, especially for themselves, if they are not properly trained and protected. For these persons, risk may be significantly higher than for other building occupants. Proper worker training and protection, as part of an active in-place management program, can reduce any unnecessary asbestos exposure for these workers and others. AHERA requires this training for school employees whose job activities may result in asbestos disturbances.

In addition to the steps outlined above, an in-place management program will usually include notification to workers and occupants of the existence of asbestos in their building, periodic surveillance of the material, and proper recordkeeping. EPA requires all of these activities for schools and strongly recommends that other building owners also establish comprehensive asbestos management programs. Without such programs, asbestos materials could be damaged or deteriorate, which may result in elevated levels of airborne asbestos fibers.

While the management costs of all the above activities will depend upon the amount, condition, and location of the materials, such a program need not be expensive. In many instances, an in-place management program may be all that is necessary to control the release of asbestos fibers, until the asbestos-containing material in a building is scheduled for removal because of renovation or demolition activities.

In summary, EPA's best advice on asbestos is neither to rip it all out in a panic nor to ignore the problem under the false presumption that asbestos is "risk free." Rather, we recommend a practical approach that protects public health by emphasizing that asbestos material in buildings should be located, that it should be appropriately managed, and that those workers who may disturb it should be properly trained and protected. That has been, and continues to be, EPA's position.

If you have questions or need additional information about asbestos in schools and other buildings, please call EPA's Toxics Hotline at (202) 554-1404 or write the Environmental Assistance Division (TS-799), Office of Pesticides and Toxics Substances, 401 M Street, Washington, DC 20460.

Sincerely,

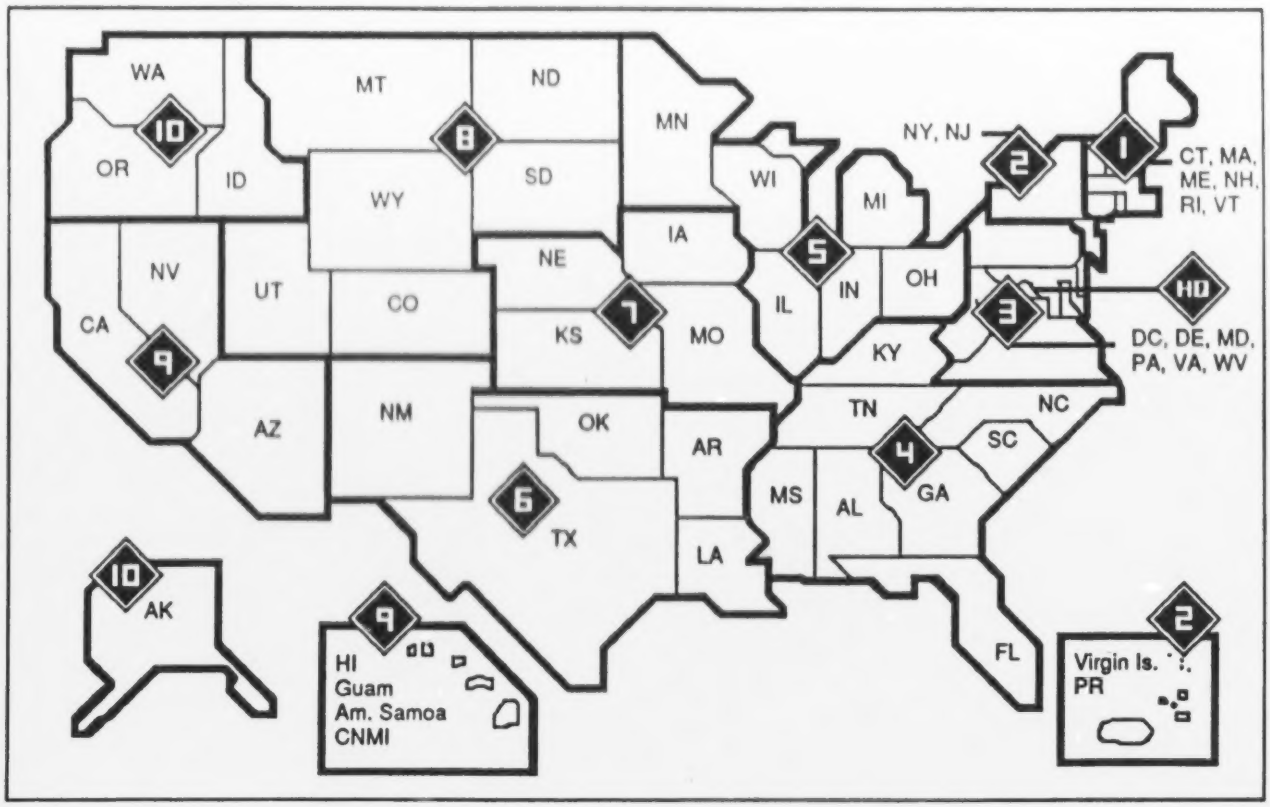
William K. Reilly

William K. Reilly

APPENDIX I

POINTS OF CONTACTS

Regional Asbestos Groups



Regional Asbestos Coordinators

Mr. James M. Bryson
EPA, Region I, (ATC-111)
Asbestos Coordinator
JFK Federal Bldg.
Boston, MA 02203-2211
(617) 565-3836 — (FTS) 835-3836

Mr. Louis Bevilacqua
EPA, Region II, (MS-500)
Asbestos Coordinator
2890 Woodbridge Ave.
Raritan Depot, Bldg. 5
Edison, NJ 08837
(908) 321-6671 — (FTS) 340-6671

Ms. Carole Dougherty
EPA, Region III, (3AT-33)
Asbestos Coordinator
841 Chestnut Bldg.
Philadelphia, PA 19107
(215) 597-3160 — (FTS) 597-3160

Ms. Rhonda Evans
EPA, Region IV
Asbestos Coordinator
345 Courtland St., N.E.
Atlanta, GA 30365
(404) 347-5014 — (FTS) 257-5014

Mr. Terence W. Stanuch
EPA, Region V, (SP-14J)
Acting Asbestos Coordinator
77 W. Jackson Blvd.
Chicago, IL 60604
(312) 353-5590 — (FTS) 886-5590

Mr. Steve Vargo
EPA, Region VI, (6T-PT)
Asbestos Coordinator
1445 Ross Avenue
Dallas, TX 75202-2733
(214) 655-7244 — (FTS) 255-7244

Mr. Wolfgang Brandner
EPA, Region VII, (ARTX)
Asbestos Coordinator
726 Minnesota Ave.
Kansas City, KS 66101
(913) 551-7020 — (FTS) 276-7020

Mr. David Combs
EPA, Region VIII, (8AT-TS)
Asbestos Coordinator
Denver Place, Suite 500
999 - 18th Street
Denver, CO 80202-2405
(303) 293-1442 — (FTS) 330-1442

Ms. Jo Ann Semones
EPA, Region IX, (A-4-4)
Asbestos Coordinator
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1128 — (FTS) 484-1128

Mr. Matt Wilkening
EPA, Region X, (AT-083)
Asbestos Coordinator
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-4762 — (FTS) 399-4762

11/27/91

AHERA State Designees

ALABAMA
William Weems
AL Safe State Program
College of Continuing Studies
University of Alabama
PO Box 870388
Tuscaloosa, AL 35487-0388
Phone: (205) 348-3033

ALABAMA
Office of the Governor
AL Safe State Program
11 South Union Street, Room 217
Montgomery, AL 36104
Phone: (205) 242-7100

ALASKA
Susan Miller
AK Dept of Education (Facilities)
801 West 10th Goldbelt Bldg
PO Box F
Juneau, AK 99811-0500
Phone: (907) 465-2865

AMERICAN SAMOA
Pati Faiai
American Samoa EPA
Office of the Governor
Pago Pago, AS 96799
Phone: (684) 633-2304

ARIZONA
Yvette David
Dept of Environmental Quality
Office of Air Quality
PO Box 600
Phoenix, AZ 85001-0600
Phone: (602) 257-2287

ARKANSAS
Dan Lovelady
AR Dept of Education
School Plant Services
Arch Ford Education Bldg
#4 Capitol Mall, Room 110B
Little Rock, AR 72201-1071
Phone: (501) 682-4261

BUREAU OF INDIAN AFFAIRS
Herman Fisher
Bureau of Indian Affairs
FMCC
PO Box 1248
Albuquerque, NM 87103
Phone: (505) 766-2454

CALIFORNIA
Sandra Proctor
School Facilities Program Analyst
Office of Local Assistance
501 J Street Suite 350
Sacramento, CA 95814
Phone: (916) 322-0948

COLORADO
Dave Ouimette
CO Dept of Health
Air Pollution Control Div
4210 E 11th Avenue
Denver, CO 80220
Phone: (303) 331-8587

CONNECTICUT
William Sawicki
Environ'l Health Services Div
CT Dept of Health Service
150 Washington Street
Hartford, CT 06106-4474
Phone: (203) 566-1260

CONNECTICUT
Michael Ruggles
Dept of Education
Plan Review Unit
Cromwell Commons Bldg
136 Berlin Road, Suite 203
Cromwell, CT 06416
Phone: (203) 635-1148

DELAWARE
Robert Foster
Dept of Administrative Services
Div of Facilities Mgmt
Short Bldg
21 The Green
Dover, DE 19901
Phone: (302) 739-3045

DISTRICT OF COLUMBIA
Edgar Kennedy
Love Joy Administration Bldg
12th & D NE
Washington, DC 20002
Phone: (202) 724-4706

FLORIDA
Hal Thomas
FL Dept of Education
Fl Education Center
Plant Mgmt & Insurance
Rm 1032, 325 West Gains Street
Tallahassee, FL 32399-0400
Phone: (904) 487-1130

GEORGIA
Don Elam
GA Dept of Education
School Safety & Environ'l Services
1662 Twin Towers East
Atlanta, GA 30334-5050
Phone: (404) 656-7059

GEORGIA
Don Thornhill
Trans Fac & Asbestos Div
GA Dept of Education
1670 Twin Towers East
Atlanta, GA 30334
Phone: (404) 656-2446

GUAM
Fred M. Castro
GU Environ'l Protection Agency
D-107 Harmon Plaza
130 Rojas Street
Harmon, GU 96911
Phone: (671) 646-8863

HAWAII
Ken Hall
Clean Air Branch
PO Box 3378
Honolulu, HI 96801
Phone: (808) 586-4200

IDAHO
Gary Barnes
Dept of Labor & Industrial Services
State House Mail
Boise, ID 83720
Phone: (208) 334-3896

ILLINOIS
R. Kent Cook
IL Dept of Public Health
525 West Jefferson Street
3rd Floor
Springfield, IL 62761
Phone: (217) 782-3517

INDIANA
Debbie Dubenetzky
Office of Air Mgmt
Dept of Environ'l Mgmt
105 South Meridian Street
Indianapolis, IN 46225
Phone: (317) 232-8373

IOWA
C. Milton Wilson
School Plant & Facilities Unit
Dept of Education
Grimes State Office Bldg
Des Moines, IA 50319-0146
Phone: (515) 281-4743

KANSAS
Gary Miller
Dept of Health & Environment
Forbes Field Bldg 740
Topeka, KS 66620
Phone: (913) 296-1547

KENTUCKY
Jim Judge
KY Dept of Education
Div of Bldgs & Grounds
1530 Capitol Plaza Tower
15th Floor
Frankfort, KY 40601
Phone: (502) 564-4326

LOUISIANA
Chris Roberie
Enforcement Program Manager
Office of Air Quality
7290 Bluebonnet Road
Baton Rouge, LA 70810
Phone: (504) 765-0110

MAINE
Gene Kaler
Bureau of General Services
Asbestos Coordinator
State House Station 77
Augusta, ME 04333
Phone: (207) 289-4000

MARYLAND
Mardel Knight
MD Dept of the Environment
Industrial Operations Program
2500 Broening Hwy
Baltimore, MD 21224
Phone: (410) 631-3846

MASSACHUSETTS
Paul Aboody
Div of Occupational Hygiene
MA Dept of Labor & Industry
1001 Watertown Street
West Newton, MA 02165
Phone: (617) 969-7177

MICHIGAN
George Howard
Dept of Public Health
Attn: Asbestos Program
3423 North Logan Street
PO Box 30195
Lansing, MI 48909
Phone: (517) 335-8246

MINNESOTA
Kerry Leider
MN Dept of Education
563 Capitol Square Bldg
550 Cedar Street
St. Paul, MN 55101
Phone: (612) 296-9786

MISSISSIPPI
Gerald Pevey
MS State Dept of Education
Bureau of Sch Bldg & Trans
501 North West Street
Suite 1205 Woolfolk Bldg
Jackson, MS 39201
Phone: (601) 359-1028

MISSOURI
Daryl W. Roberts
Bureau of Environ'l Epidemiology
Health Dept
1730 East Elm Street
PO Box 570
Jefferson City, MO 65102
Phone: (314) 751-6102

MONTANA
Andrea Guthrie
Dept of Health & Environ'l Science
Cogswell Bldg, Room A107
Helena, MT 59620
Phone: (406) 444-2690

NEBRASKA
John Hall
NE Dept of Health - EHHS
301 Centenial Mall South
PO Box 95007
Lincoln, NE 68509
Phone: (402) 471-2541

NEVADA
Douglas M. Stoker
NV Dept of Education
1850 E Sahara Ave
Suite 200 State Mail Room
Las Vegas, NV 89158
Phone: (702) 486-6455

NEW HAMPSHIRE
Doug Brown
Dept of Education
State Office Park South
101 Pleasant Street
Concord, NH 03301
Phone: (603) 271-4609

NEW JERSEY
James A. Brownlee
NJ Dept of Health
Environ'l Health Services
CN 360, 210 S Broad Street
Trenton, NJ 08625-0360
Phone: (609) 984-2193

NEW MEXICO
Dr. Ed Tangman
State Dept of Education
Education Bldg
300 Don Gaspar Street
Santa Fe, NM 87501-2786
Phone: (505) 827-6670

NEW YORK
Dr. Mae Timer
Bureau of Educational Mgmt Svcs
NY State Education Dept
Room 510
Education Bldg, West Wing
Albany, NY 12234
Phone: (518) 474-3911

NORTH CAROLINA
John J. "Pat" Curran
Asbestos Hazard Mgmt Branch
441 N Harrington
Raleigh, NC 27603
Phone: (919) 733-0820

NORTH DAKOTA
Dana Mount
ND Health Dept & Consolidated Laboratories
1200 Missouri Ave, Box 5520
Bismarck, ND 58502-5520
Phone: (701) 221-5188

NORTH DAKOTA
Ken Wangler
Dept of Public Instruction
600 E Blvd Ave
Bismarck, ND 58505-0440
Phone: (701) 224-2267

NORTHERN MARIANAS
F. Russell Mechem, II
Div of Environ'l Quality
Dr. Torres Hospital
PO Box 1304
Saipan, MP 96950
Phone: ( )

OHIO
Marty King
OH Dept of Health
35 E Chestnut
7th Floor
Columbus, OH 43266-0588
Phone: (614) 466-1450

OKLAHOMA
Emily Allen
OK State Dept of Health
Special Hazards Div
Consumer Protection Service 0202
1000 NE 10th
Oklahoma City, OK 73117-1299
Phone: (405) 271-5221

OREGON
Al Shannon
OR Dept of Education
700 Pringle Parkway SE
Salem, OR 97310-0290
Phone: (503) 378-8142

PENNSYLVANIA
Dean Van Orden
Dept of Environment Resources
101 South 2nd Street
PO Box 2357
Harrisburg, PA 17105
Phone: (717) 787-9257

PUERTO RICO
Jesus Santa
Environ'l Quality Bldg 6
PO Box 11488 Hato Rey
431 Ponce De Leon Ave
San Juan, PR 00910
Phone: (809) 767-8071

REPUBLIC OF PALAU
Executive Officer
Palau Env Qual Proj Bd
PO Box 100
Koror, PW 96940
Phone: ( )

RHODE ISLAND
Roger P. Marinelli
Dept of Health
Div of Occupation and Radiological Health
206 Cannon Bldg
3 Capitol Hill
Providence, RI 02908-5097
Phone: (401) 277-3601

SOUTH CAROLINA
G. Stuart Clarkson
SC Dept of Education, School Planning & Bldg
Rutledge Bldg
1429 Senate Street
Columbia, SC 29210
Phone: (803) 734-8823

SOUTH DAKOTA
Bob McDonald
Dept of Environment & Natural Resources
319 S Coteau
c/o 500 E Capital Ave
Pierre, SD 57501
Phone: (605) 773-3153

TENNESSEE
George Brumett, Jr.
Office of Special Initiatives
Div of Facilities Mgmt
Dept of Finance and Admin
Suite 500
Nashville Ctr 511 Union Street
Nashville, TN 37243-0300
Phone: (615) 741-6319

TEXAS
Peter M. Tadin
TX Dept of Health
Div of Occupational Health
1100 West 49th Street
Austin, TX 78756
Phone: (512) 834-6600

UTAH
Joan Thalmann
Dept of Environ'l Quality
Div of Air Quality
1950 West North Temple
Salt Lake City, UT 84114-4820
Phone: (801) 536-4084

VERMONT
Alayne Senior
VT Dept of Health
Asbestos Program
60 Main Street
PO Box 70
Burlington, VT 05402
Phone: (802) 863-7231

VIRGIN ISLANDS
Hugh M. Smith, Jr.
Dept of Education USVI
44-46 Kongens
Gade, Charlotte Amelia
St. Thomas, VI 00801
Phone: (809) 774-8315

VIRGIN ISLANDS
Leonard Reid
Dept of Planning & Natural Resources Environ'l Protection
458 Nisky Center Suite 231
St. Thomas, VI 00802
Phone: (809) 774-1320

VIRGINIA
David Boddy
Dept Of Education
James Monroe Bldg, 24th Floor
101 N 14th Street, PO Box 6Q
Richmond, VA 23216
Phone: (804) 225-2035

WASHINGTON
Terry Michalson
Superintendent of Public Instruction
Old Capitol Bldg, FG-11
Olympia, WA 98504
Phone: (206) 753-6729

WEST VIRGINIA
Joseph P. Schock
Office of Environ'l Health Services
Capitol Complex Bldg 3
1900 Kanawha Blvd E, Room 550
Charleston, WV 25305
Phone: (304) 348-2981

WISCONSIN
Gina Cowell
WI Div of Health
Asbestos Unit
1414 E Washington Ave, Rm 117
Madison, WI 53703
Phone: (608) 267-2289

WYOMING
Dr. Roger Hammer
WY Dept of Education
Hathaway Bldg, 2nd Floor
2300 Capitol Ave
Cheyenne, WY 82002-0050
Phone: (307) 777-6198

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